RAILROAD

JULY, 1965 MAGAZINE 50¢

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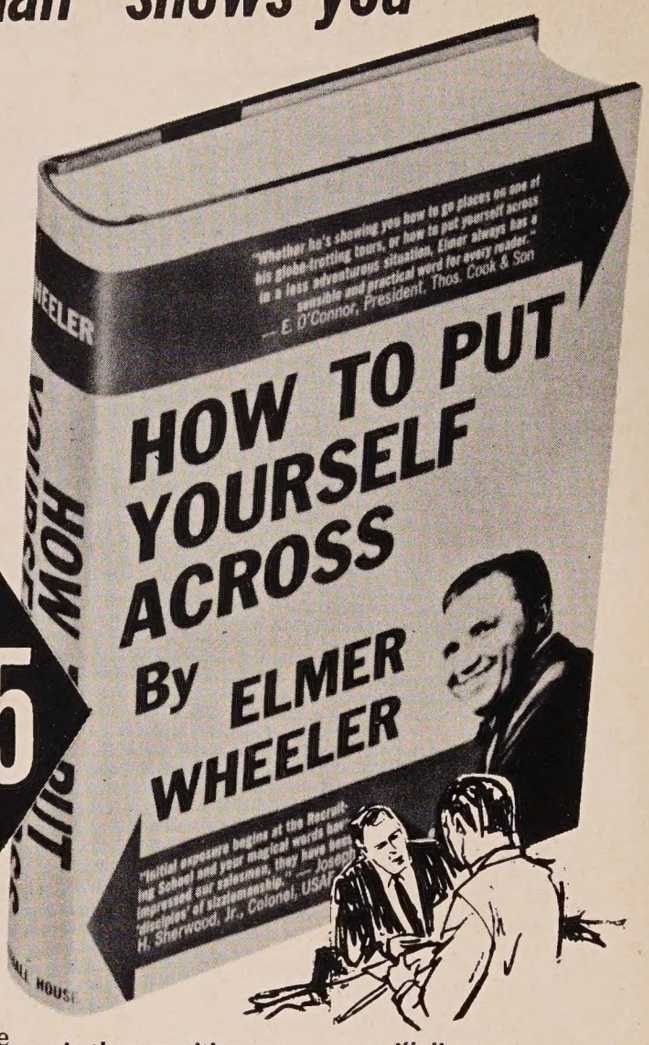
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ABOUT THE AUTHOR

Elmer Wheeler, known as "Mr. Sizzle" to millions of salesmen around the world, is always in great demand for speaking engagements. Early in his career Elmer took as his motto "Don't sell the steak—sell the sizzle," and turned it into an imposing business philosophy with a string of successes to prove it. Thousands of men and women have been shown the way to greater success in Elmer's over 20 books. In this book Elmer's advice and experience is directed to people everywhere who wish to learn the knack of improving human relations in all phases of life.

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SY REICH
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ARTHUR T. KNOWLES
Assistant Editor

BARBARA KREIMER
Information Booth

STEVE MAGUIRE
Transit Topics

H. L. KELSO
Contributing Editor

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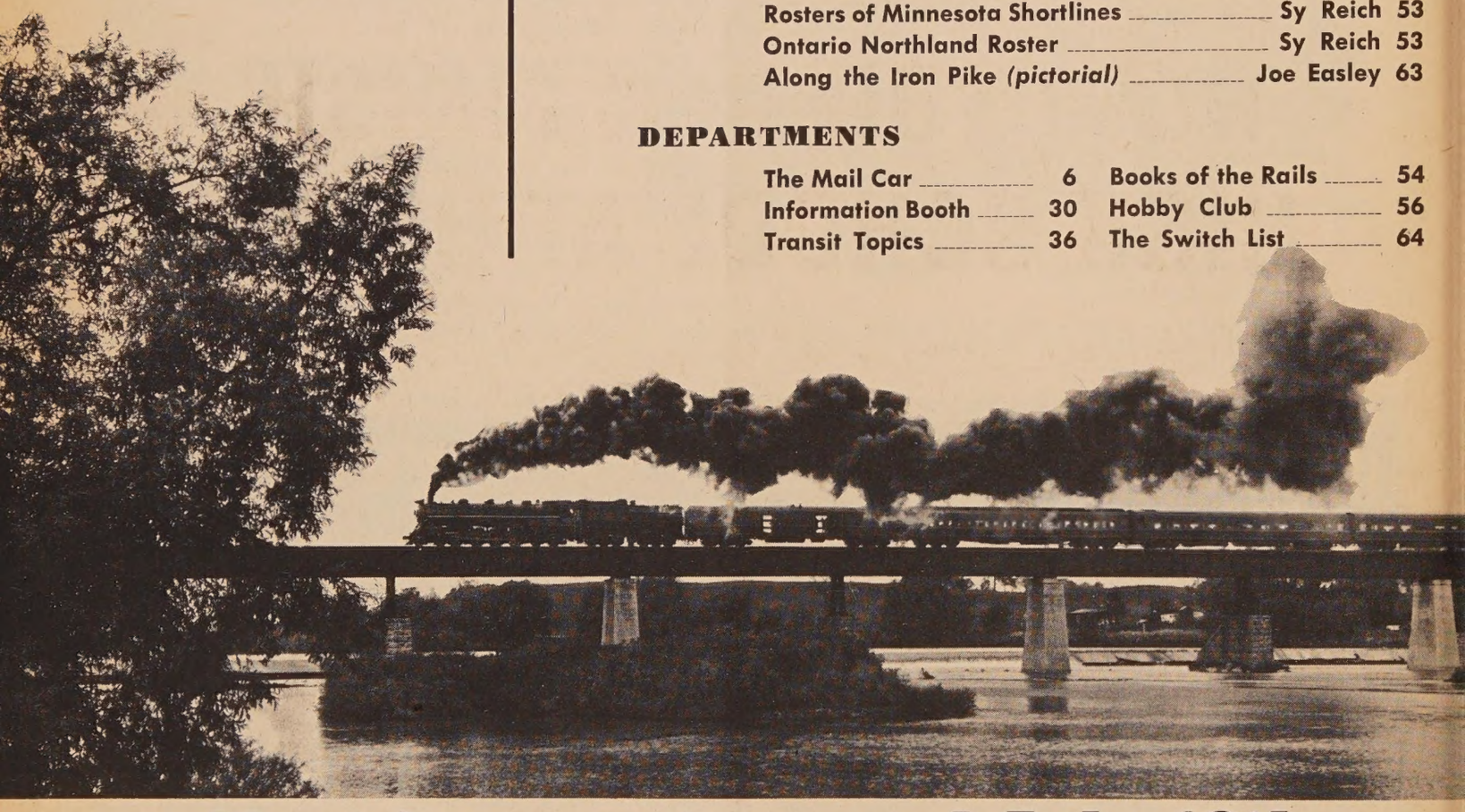
June 4, 1961: Canadian National's 6167, wearing a smoke plume as long as her train, gives fan excursionists out of Toronto a memorable run.

Photo by Allen Jorgensen



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THOMAS HARRAGAN, *Associate Publisher*
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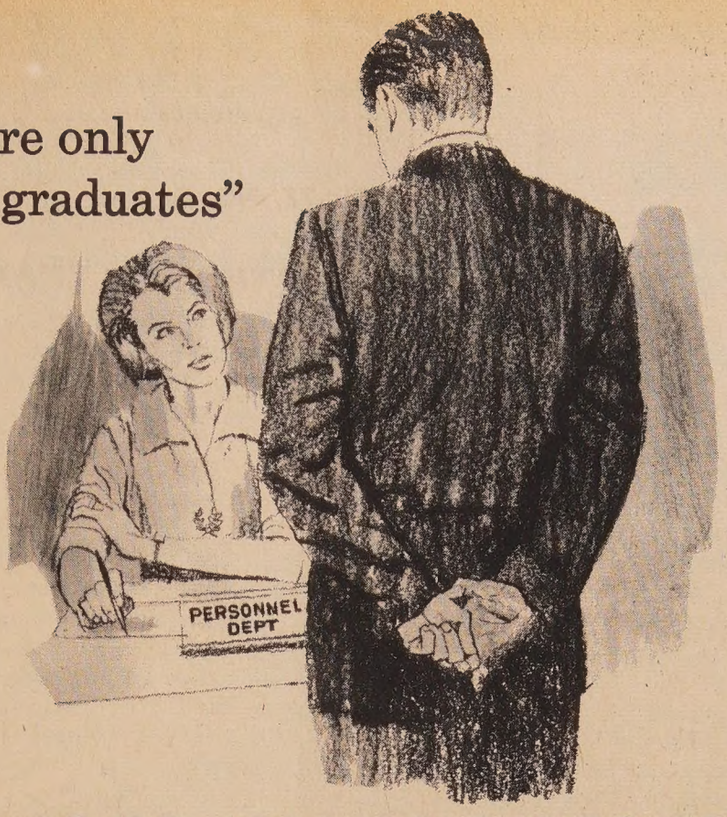

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THE MAIL CAR

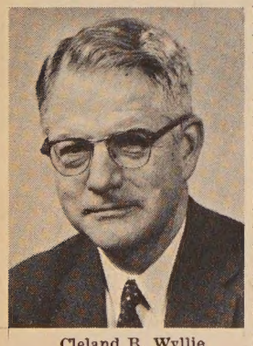
where editors and readers meet

UNDERGROUND trains running at three hundred miles an hour? Very likely. *U.S. News & World Report* said so in a new article entitled "Amazing Plans for Speeding Travel." Don't belittle the idea. It is looked upon favorably by W. W. Seiffert, dean of the Massachusetts Institute of Technology, and Dr. Robert Nelson, director of transportation research at the U.S. Department of Commerce in Wahington, D.C.

The project emanated mainly from the railroad supply industry and something will be done about it—or at least started—this coming July 1st. To buy property and tear down many buildings for a surface right-of-way would be very expensive, hence the projected underground line to be built well below the public utility installations. Admittedly, the scenery won't be beautiful—what subway scenery is? Boring through solid rock probably wouldn't cost as much as building additional super-highways. The cars will be wider and, it is hoped, will give passengers a smoother ride.

The Rollway train, devised by Deodat Clejan (inventor of a special type of piggyback car), is in the picture. This car—or trains—is for the transportation of private autos and their passengers. The autos can be rolled onto and off the railroad cars at suitable docks. Just wait and see! ●

PERSONALITIES. Cleland B. Wyllie was born at Durand, Mich., in 1906, the year *Railroad Magazine* first hit the news-stands. His father, a Grand Trunk Western employe, was station-master at Durand during the passenger-travel peak. Later, Cleland worked two years in GTW offices and still later went into journalism. For six years he regularly wrote a railroad column for two Michigan newspapers in addition to many other railroad articles and news stories. Since 1959 he has averaged 10,000 miles of train-riding a year.



Cleland B. Wyllie

His "Rail Passenger Service Needs Positive Thinking" (in this issue) is condensed from a piece he had in the *Michigan Business Review*, Jan. '55, published by The University of Michigan's Graduate School of Business. We reprinted it by permission.

Says C. William Robinson, 1514 Kenilworth Ave., Calumet City, Ill.: "I am a locomotive fireman on the Indiana Harbor Belt. As an engineman I also hold rights on the New York Central's Illinois Division (Big Four). Although I've been promoted a number of years and have done some running, I've never been set up to engineer. My hobby is writing."

Phil Kohl and Charles R. Wood, 3815 51st Ave. S.W., Seattle, Wash. 98116, are writing a book on mainline railroads of the Pacific Northwest. They need good steam action photos of the GN, NP, Milwaukee, UP, and SP in Oregon, Washington, Idaho, and Montana. Also they want the present address of Philip G. Johnson, formerly of Coeur d'Alene, Idaho.

Old age for railroaders, 114 years, is claimed by Will Adams, former Louisville & Nashville trackman of Atmore, Ala. The L&N was chartered March 5, 1850. According to official records, Mr. Adams was born August 20th that same year. As of last September, he was the fourth oldest American drawing Social Security. The *L&N Magazine* reports that his health, memory, appetite, and sense of humor are good but one eye is blind. Only twice in his life, Mr. Adams says, has he ever been under a doctor's care, once with eye trouble and later after he had fallen out of a pecan tree.

"In 1893, when I started firing," writes F. J. Young, retired New York Central hogger, "engines were hand-fired and had shallow fireboxes and low, backbreaking firedoors. The coal we burned made more clinkers than ash, more soot than steam. Boilers leaked, valves wheezed, pumps squeaked. To keep those early hogs running you had to be a blacksmith, boilermaker, machinist, and magician."

Death has come to Edward Keating, age 89, founder and for many years editor and manager of *Labor*, the national weekly paper of the railroad brotherhoods. Keating served as editor from 1919 till he retired in March, 1953. During that time *Labor* became one of the nation's best-known and most influential weeklies.

Henry H. Fowler, U.S. Secretary of the Treasury in President Johnson's cabinet, was the son of the late Mack J. Fowler, local chairman of the Brotherhood of Locomotive Engineers on the Norfolk & Western at Roanoke.

George B. Abdill, locomotive engineer on the SP's Oregon Division, and resident of Roseburg, has completed a new pictorial railroad history titled *A Locomotive Engineer's Album*, which is scheduled for publication early this fall. This is his fifth book on oldtime railroading. ●

ROCKY ROBERTS' article on "Boiler Explosion" in our Feb. '65 issue prompted Tom Kerby to tell us about an explosion that occurred on the Tucson Division of the Southern Pacific on November 11, 1946 about a mile east of the siding in Bosque, Arizona. Tom is president of Cactus Lodge No. 94 of the Brotherhood of Locomotive Firemen and Enginemen, Rte. 8, Box 427, Tucson, Arizona.

"The engines involved were the 5037, a 4-10-2 steamer with three cylinders," he writes, "and a little Alco diesel goat, No. 1333, which was the helper engine. Bosque is located about 8 miles east of Gila Bend. It lies on a steep grade, as does the entire line from Gila to Estrella, about 20 miles. This was helper territory until we were dieselized.

"Little did Engineer Harry Hall of the 5037 and his fireman, Walt Glisson, realize as they cleared Gila yard and headed east that this would be their last trip. It would also be the last run for Engineer Johnny Rhodes and his fireman, Frank Bogulas, who were in charge of diesel helper. The 5037 was equipped with a Worthington feedwater pump. These pumps were prone to become steambound and hence required close attention.

"As the train came into Bosque the 5037 was working very hard and, apparently unnoticed by the crew, the pump became steambound. With the water supply to the boiler cut off, it was only a matter of a very few moments before the crownsheet dropped and the boiler exploded. The entire boiler was torn from the frame and thrown end for end several hundred feet eastward down the track, coming to rest on its side. The bodies of Engineer Hall and Fireman Glisson were found on the north side of the tracks some distance from the explosion. The other engine crew were not killed immediately but died enroute to the hospital.

"The 5037 had been fitted with a new boiler from Alco in 1947 and served out a few more years of useful service before being scrapped April 30, 1954. The 1333 was repaired and is now working somewhere on the SP.

"I have five different prints showing this tragedy. To my knowledge, it was the only boiler explosion the Tucson Division ever had. I understand that there have been many such explosions elsewhere on the SP. Perhaps some brother can enlighten us to the details of others." ●

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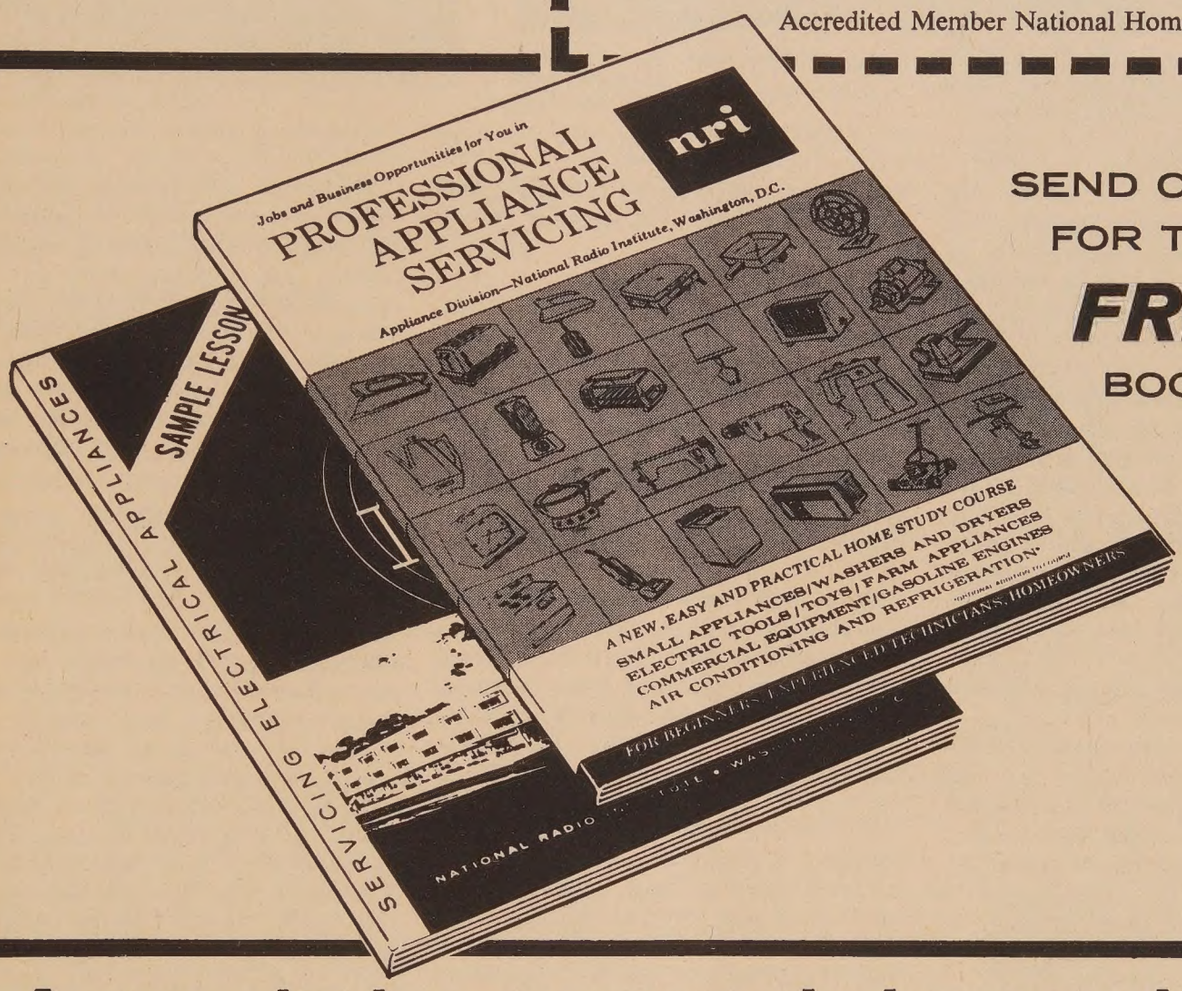
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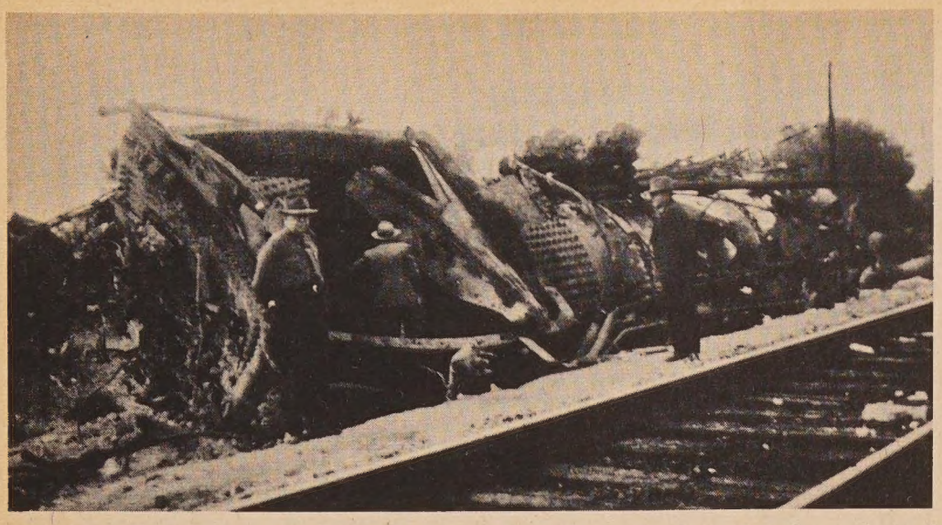

Boiler explosion on the SP. (see letter from Tom Kerby, who also supplied the photos.) Engine at the left, No. 50371; at the right you see No. 1333.

MOTORISTS and truck drivers are annoyed by the time wasted while railroad crossing gates are lowered in switching areas. They should welcome the new control system designed to keep those gates up more of the time. This system has been developed by the Servo Corp. of America, Hicksville, N.Y., inventors and manufacturers of the Servo hotbox detector. Formerly, when a switching engine or a train was within the crossing-gate circuit, the gate was down. The new electronic device keeps it down only when a train is approaching. It also holds the gate up for a longer time when a switcher or train is moving slowly than when it is bearing down at a faster clip. (See photograph on page 56.)

Servo worked on the crossing problem for more than two years in conjunction with the Milwaukee Railroad. The new device isn't expected to pay dividends to any railroad, but we think that state highway departments should bear at least part of the cost of installation. Seems like a good thing. ●

BRIEF ITEMS. Annual pay checks of America's 665,000 railroad employes last year averaged $7,100. This is 14 percent higher than the average earnings in general manufacturing jobs.

A house being moved by a salvage company stalled on a railroad crossing at Callahan, Fla. An Atlantic Coast Line train, the *West Coast Champion,* demolished it. The enraged mover sued the ACL, but a circuit court jury found him at fault and awarded the railroad $3,000 for damages to its diesel locomotive.

"Shortly after you published my letter (in May issue) in which I mentioned $200 as the basic cost of joining the Rail Travel Promotion Agency," writes Al Franck, P.O. Box 171, Richmond Hill 18, N.Y., "I learned that the Agency has cut its initiation and membership fees. The annual fee is now $50."

Since April 29, 1959, when the Chesapeake & Ohio ended its passenger service to Logan, W. Va., it had been wondering what to do with its station, its two storage buildings, and a half-acre of land, all in Logan. Now, at last, the road has decided. It is giving that property to the city, reports Larry Fellure, 1015 Oak St., Kenova, W. Va.

Santa Fe's Coast Lines *Expediter,* a Los Angeles to Seattle hotshot in cooperation with WP and GN, presents an odd look with an extra caboose coupled right behind the diesel units, reports Denny Whitney. The extra crummy is put into the consist when the train is assembled in San Bernardino. The whole idea is to save time at Barstow, where crew and power are changed. When the train leaves Barstow for Mojave it is reversed from the way it enters Barstow. The new power is merely coupled on behind the former rear caboose while the old power is uncoupled and the new crew boards what used to be the head-end caboose.

"A steam engine had her own personality," according to F. W. Nitsche, retired Joliet & Eastern engineer. "She was temperamental. You had to handle her right or she wouldn't do the job she was capable of. She was a challenge to a hogger. I never cared for diesels—overgrown streetcars."

Railroads in U.S.A. handled a postwar record volume of freight last year—a total of 659 billion ton-miles (one ton moved one mile), six percent over the 1963 level. But the railroads receive less than 1-1/3 cents for moving the average ton of rail freight one mile. Motor carriers average 6½ cents, air carriers 22 cents.

Regarding the reverse lever of the steam locomotive, John P. Scharle, 136 N. Penn St., Allentown, Pa. 18102, expresses the opinion that the term *Johnson bar* may have come from the Johnson hand-operated interlocking machine. He recalls that both the tower lever and the old locomotive reverse lever were rather formidable looking and somewhat similar in appearance.

For the first few months of this year, writes James Burke, Eureka, Calif., the north end of the Northwestern Pacific (part of the SP) was cut off from the outside railroad world. Devastating Christmas-week floods destroyed nearly 100 miles of line, including several major bridges. SP diesels waited in the Eureka roundhouse for the line to reopen late this spring. At nearby Scotia yard, switcher No. 4625 worked daily with a big hook rerailing boxcars which the swollen Eel River had toppled over. Incidentally, the three retired steam engines of the Pacific Lumber Company's mill at Scotia—Nos. 29 (2-6-2), 35 (2-8-2T), and 37 (2-8-2)—didn't even get their feet wet in the high water.

Edward O'Hara was riding in a 1965 Cadillac when he was arrested by police at Liberal, Kan., reports Walt Thayer. The Cadillac was part of a cargo of new cars being shipped on a Rock Island freight train. Judge Bryan interrupted O'Hara's trip to his undisclosed destination by ordering him to spend 30 days in the county jail on a trespassing charge.

In 1964 American railroads achieved their best passenger safety record in five years, according to the Association of American Railroads. The roads report 11 fatalities—lowest annual total on record—in carrying 314 million passengers a total of 18.3 billion passenger-miles. ●

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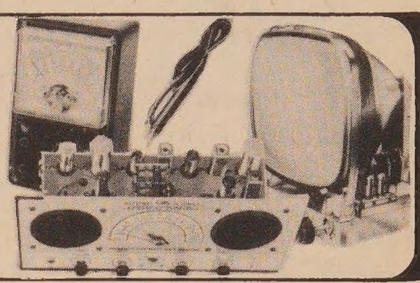

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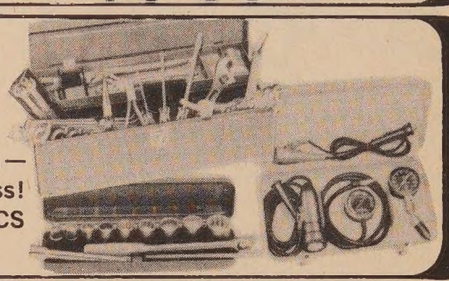

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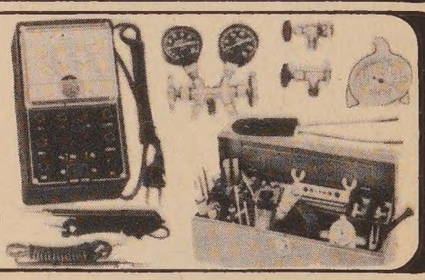

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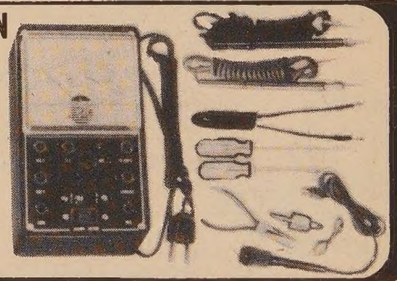

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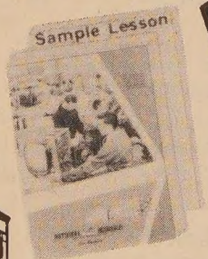

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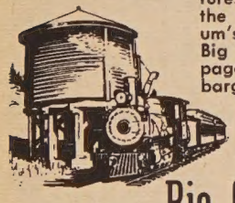

josie crum's Rio Grande Southern

The author has had a limited 3rd printing made of this well known 431 page history of Colorado's famed Rio Grande Southern narrow gauge, and we will have them as long as they are available, at the publisher's price of $10.50 ppd.

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OLDTIMER. "As a Canadian Pacific fireman at Schreiber, Ont., in 1893," H. J. Brock writes in *The Locomotive Engineer,* " I cleaned the cab and windows, wiped the jacket, painted the smokebox, polished the bell, and filled the lubricator and rod cups. From the oilhouse (100 yards distant from the shop) I toted all the oil needed for the next trip—two gallons of oil for the engine, one gallon of coal oil for headlight, and one quart for signal lamps; one quart of valve oil for lubricator and rod cups and a half-pound of waste. I didn't get time off to do these extra chores—I had to do them on the days I was firing.

"As a CP engineer in 1898, besides running the engine I had to set up wedges, key up rod brasses, pack all mountings (including main throttle), make syphons (with yard and copper wire), and put in driving boxes from top 'dope cellars,' attend to the headlight, making the wick with flannel), and pack valve stems and piston rod boxes with rubber and hemp." ●

CASS SCENIC RR. article by Bill Warden in our June issue evokes this comment from Dean Mellander, 2705 Newton St., Silver Spring, Md.

"The author states that Cass No. 205, a four-trucker, was the largest Shay ever built. I know of at least one other four-trucker, the Red River Logging Company's 300, pictured in *Railroads in the Big Woods,* by Labbe and Goe. While her weight is not stated, she looks huge and seems to have exceptionally large drivers. Changing the subject, I'd like to hear from readers who can supply information on the old Cumberland & Pennsylvania." ●

AMERICAN railroads have taken 15,000 locomotive firemen off the payroll in less than a year, following a ruling in 1963 which authorized the action. A spokesman for management said only 11 percent of the men have shown up on unemployment rolls.

Severance pay has cost $30 million, but a $75 million saving in wages is expected. Some 6,000 of the remaining 22,000 firemen are expected to be eliminated in the second year. ●

THIS answer to H. L. Kelso's query concerning the Northern Pacific's USRA 0-8-0's, included in his article in our May issue, comes from Don H. Roberts, 151 N.E. 45th Ave., Portland, Ore. 97213:

"The *Locomotive Equipment Book* issued by the NP's Mechanical Department, corrected to April, 1950, shows the ex-USRA 0-8-0's numbered 1170-1173, Class G-1, as having 51-inch drivers and 25x28-inch cylinders.

"Originally USRA assigned those engines to the Spokane, Portland & Seattle but changed their minds before delivery. The NP G-2 Class numbered 1174-1193 shows the same specifications except for 217,000 pounds of weight."

Regarding Kelso's statement concerning the NP 916 and 917, Don says those two engines were not operated by the NP but by the Simpson Logging Co. under lease at McCleary and Shelton, Wash. The 916 was converted from wood to coal and a diamond stack was added some time between Feb. '32 and May '37 and leased to Simpson. The 901 also was changed to wood but without a diamond stack and also leased to Simpson.

"The 917, according to my records," Don goes on, "was on the deadline at South Tacoma and shown as 'waiting disposition.' Then she was shopped and she relieved the 901, which was scrapped at South Tacoma in 1940. The 1033 was leased to Simpson, and 917 was junked in 1946, and No. 916 in 1947, both at South Tacoma. In June, 1954, Class 1-9 0-6-0's were leased to Simpson, and 1033 was scrapped the following September. On April 6, 1958, Simpson bought NP 1070, Class L-9, and used her until they donated her to the Puget Sound Railroad Historical Assn. for display near Seattle.

"Great Northern had about 125 0-6-0's out of a grand total of approximately 1500 engines. A good percentage of them had Belpaire fireboxes, which was unusual. The GN, in fact, probably had the largest fleet of Belpaure-equipped locomotives in the country, except for the Pennsy."

Says John B. Allen, P.O. Box 259, Centralia, Ill.: "You might inform Mr. Kelso regarding left-hand 0-8-0's that the Chicago & Eastern Illinois had three of these. They were originally 2-8-0's numbered 803, 808, and 810, built by Schenectady in 1891 and 1899, originally numbered 104, 109, and 111. The 111 was built as Duluth & Iron Range No. 28.

"These three locos were converted to left-hand 0-8-0's in January, 1915, for use on the Joppa, Ill., incline. At that time C&EI had a steamer on the Ohio River named *Wm. J. Jackson.* The incline curved going down to the river so that the locomotive had to be backed down to keep the water over the crownsheet, which placed the engineer on the outside of the curve on an orthodox or right-hand throttle. Hence the conversion of the trio to left-handers." ●

RELIGIOUS scruples caused the Erie-Lackawanna to offer to stop trains at a certain depot "by appointment." This offer came up in connection with the railroad's petition to the ICC for permission to abandon trains 7 and 8 between Hoboken and Chicago. These are the only trains that currently

(Continued on page 41)

Don Bolander, M.A., University of Chicago; B.S., Northwestern University; Director of Career Institute; authority on adult education.

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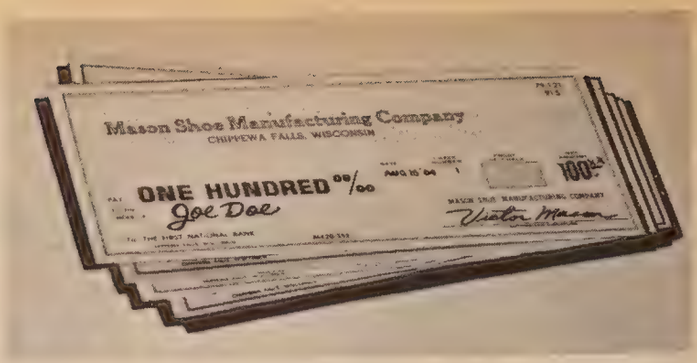

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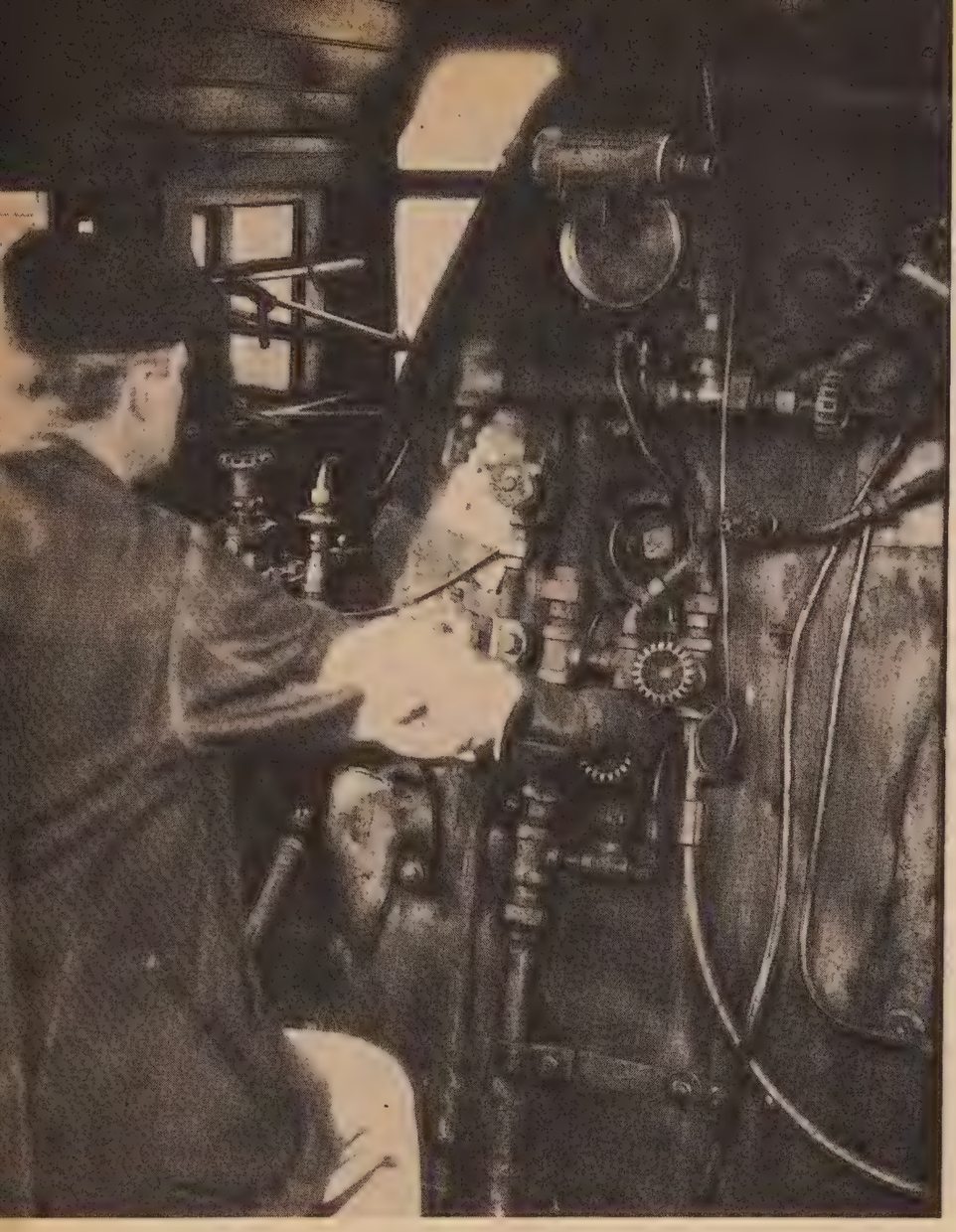


40 YEARS IN JERSEY CENTRAL ENGINE CABS

by Warren B. Crater

View of rear boiler head, fireman's side, in locomotive cab of CNJ 810, a Pacific type

FROM my early home in Lorraine, N.J., near the Jersey Central main line, I spent much of my boyhood prior to World War 1 watching steam trains. It wasn't the great billowing smoke plumes that captured my imagination, for the Central Railroad of New Jersey had relatively little smoke in those days. Passenger engines and most of the freight power burned anthracite. The sights I recall most vividly were sparks shooting from stacks at night, lighting the sky like giant Roman candles and filling me with ecstasy.

With a westbound grade from Elizabeth and all the freights starting from Elizabethport, those engines really worked hard as they thundered through my town. Right now in my mind I can see those sparks leaping skyward. I learned in time that a screen kept the stack from emitting live coals large enough to set the countryside ablaze while the jumbo hopper was provided to rid the smokebox of them.

A milky white residue streaming down over all engines burning hard coal consisted of a liquified gas residue from the fire. This residue adhered to the inside of the stack, was carried upward by the noisy exhaust, and dripped down outside, reminding you of the tallow on a candle.

From 1910 on, until I was old enough to go to work, I missed very little of the daily spectacle of trains passing my home. Those sights and sounds and smells eventually led me into a railroad job. Since then, I have been employed in CNJ engine service for four decades, except during a short hitch on a New York subway line while furloughed in the Depression of the early 1930's.

The locomotives I watched as a lad became numbers to be remembered. I soon learned to recognize them by their bells, whistles, and exhausts. At that time the Jersey Central classified its power by the first number in each group. Thus the 500's were American types numbered 500 to 532, the 600's were Ten-wheelers, 600 to 630, and so on.

My favorites were the handsome Atlantics built at the Reading shops in 1912'-13, numbered 800-805. The 800's pulled B&O trains and the Jersey City-Philadelphia expresses. The 600's wheeled the heavier passenger locals while the 500's and 200's handled the lighter short runs.

I remember the 200's as a distinctively local breed of 2-6-2 tank engine intended for short runs to points which had no facilities for turning them. As for the 500's, pilots at the rear of their tanks enabled them to run in either direction. The 430's and 650's were 4-8-0 and 2-8-0 freight-hauling coal hogs. Ten-wheelers with 69-inch driv-

CNJ pay-car and engine 42. Warren Crater fired 569 on the pay-car's last trip 40 years ago.

Queen of the Valley in 1905 Bound Brook, N.J., on run between Camden and Atlantic City, reputedly making a mile a minute.

All photos on pages 14 and 15 from author's collection

Lehigh River flood in 1901 (pictured here), before Warren Crater was born, did much damage to CNJ property; but, of course, it never reached the famous inclined plane railway whose enginehouse you can just barely see on top of Mt. Pisgah.

ers, in the 150 and 750 series, took on the fast freight.

When I was a mite in the second grade, my teacher asked me to deliver a note to her father, the operator in Lorraine tower, two blocks from our school. This note said that her mother had gone out for the day and she (the teacher) had left her key at home. The tower's interlocking system intrigued me so much that I forgot all about the note. I was painfully reminded of it when my teacher came to the tower herself, fussing and fuming, ate her father's lunch, and then led me back to school by the ear. After that, my mother had to show up at the school, and the rest need not be explained here.

My education was marked by sketches of 800's drawn on arithmetic and spelling papers and considerable time spent hanging around the railroad. I became acquainted with many of the men running and firing the Philadelphia expresses, the Cranford locals, and the road drills. Some of the men I knew at that time were in the crews I have since worked with as fireman and/or engineer.

WORLD WAR 1 came. The Jersey Central's large oil headlights gave way to electrics; and the first Mikados, equipped with Standard stokers, appeared on the freights. These Mikes burned soft coal, thus introducing smoke to New Jersey's suburban towns. To photographers and railfans in general this smoke was a desirable asset but to everyone else it was a nuisance. Housewives who hung out clothes to dry complained sharply.

Some soot was eliminated by a redrafting and rearranging of the locomotive's front end, but wherever bituminous coal is burned there is bound to be some smoke and cinders. Further changes reduced most of the irritating cinders to fly-ash — which, however, could still form a speck in your eye.

At that time the ticket offices handled many Western Union telegrams. Delivering these after school supplied me with pocket money. The agent-operator at Roselle, N.J., has since become a crew dispatcher at Elizabethport—the man I must reckon with now for a day off. My chief rival for delivering the telegrams long ago is now a train dispatcher from whom I get an occasional train order through a local operator.

My chief rival for delivering telegrams long ago is now a train dispatcher from whom I get an occasional train order through a local operator.

On June 16, 1925, I went firing proudly for the Jersey Central. I was hired by the master mechanic at Communipaw (today the road foreman hires firemen). After passing the physical and color tests, I was given my first yard job. This consisted of firing a large, heavy 0-6-0, No. 111, built by Schenectady in 1923, that switched general cargo on the lighterage pier at Communipaw. My new status elated me. I had taken my first step toward my life goal, which was to be a locomotive engineer.

Shortly afterward the road shifted entirely to soft coal. Then it introduced buck coal in small sizes. The really fine stuff was known as snake-eye but officially designated No. 4 buck. Much of it shot out of the stack only partly burned, and drummed like hail on the coach roofs. In later years a device called the Speno machine screened it out of the roadbed ballast and it became fill-dirt.

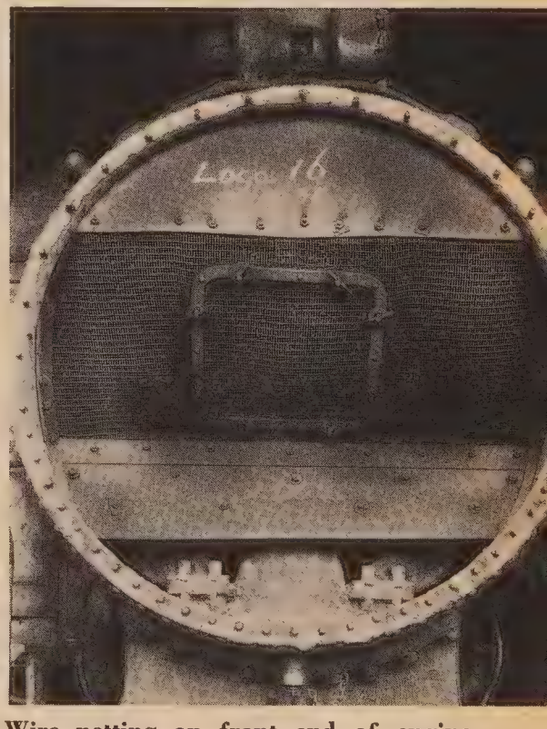
When I started firing, Pacifics and Mikados had replaced the older engines in main-line service. The 150's and 750's were transferred to heavy local passenger service. The 430's and 650's went to the lesser freights, to the branches, and to pusher service. Many antiquated small engines were being scrapped. The Atlantics were still handling fast runs with light trains, including the pre-*Comet* Atlantic City and the Harrisburg. Actually, I fired few Eight-wheelers, no Moguls, and only one of the 1888-built Consolidations. However, I fired 4-4-0 No. 569 on the last trip of the old pay-car in 1925.

Senior engineers held all the mileage passenger runs and all of their regular firemen were promoted engineers. With business booming and many new men being hired, some newcomers replaced the moved-up men on these jobs. The others fired in the yard for the new engineers. We took our turns on regular jobs as our seniority built up.

I did most of my firing in local passenger service, with a few hitches on the Harrisburg and main-line locals, freights, and road drills.

MY FIRST really hard trip was in the winter of 1925-'6. Two or three engine crews were called each eight hours to lay extra at Jersey City to take whatever came up on short notice. Under this setup one Saturday night Gus Woody and I caught a second excursion to Scranton. The engine, No. 776, was a notoriously poor steamer and we had ten cars. We never found at what pressure she blew off—she didn't.

Head brakeman occupied this cramped space in center cab of CNJ 434, a 4-6-0 type Camelback (Brooks, '99).



Wire netting on front end of engine 16, an 0-6-0 switcher (Brooks, 1906), photographed 1938, broke up cinders. Many CNJ engines had such screens.

After "murdering"—some men call it rawhiding—our way to Phillipsburg, the blower brought the needle almost up to twelve o'clock while taking coal at the main-line chute and again, almost, while taking water at Oldenwater, just west of Easton, Pa. Then at Mauch Chunk, Pa. (now called Jim Thorpe, from the great Indian athlete), pilot engineer Fred Myers took the big stick.

Those jobs usually had a traveling fireman from Mauch Chunk to Penobscot and we got ours at Penobscot. Gus Woody and I stood on the left side to warm up. It was really tough to shovel half-snow and half-coal on the tank deck, with no storm curtains, through the Lehigh River gorge and up to Penobscot. The traveling fireman kept her hot while drifting down the backtrack to Ashley, where a helper engine was coupled ahead. Up over the Delaware & Hudson along the Lackawanna River we could hear the helper bark at the stack while our 776 kept saying *woosh-woosh*. The end product was a five-hour trip made in just over eight hours.

The bunkhouse at Scranton was kept spic and span, thanks to the custodian. After eating the usual ham-and, we left our muddy shoes at the stairs, by his order, and climbed up to a clean bed and eight blessed hours of sound sleep.

With the pilot running the engine, a traveling fireman on the banjo (coal scoop), and the helper ahead, Gus and I rode the left side to Penobscot. Then I went back to fill the tank with water while the helper was cutting off and I found the steam gage at 165. This was pretty good for that engine after thirteen miles of nearly two percent grade. Here on top of the state in an icy wind we were all thankful that the Jersey Central was not uphill both ways.

Back down in New Jersey, our troubles were not yet over. The 776 broke down at White House and we limped to Raritan, where we replaced her with the 786. The latter was not much better. All her crown bolts leaked and clinkers had piled up to the bottom of the fire-doors. We did not have 220 on the gage, but we did make a good run to Jersey City, arriving in the wee hours of Monday, with a two-hour wait for the next train home. That was my biggest pay trip in many years.

SOME time later, the 776 was the regular engine on a ten-car commuter train which I fired. Meanwhile, some of us had discovered that, with a small heel across the front of the fire, she would steam like a purring kitten and would not clinker. Had I known that sooner, my tough trip could have been made with but one tenth the labor.

The High Bridge branch has always fascinated me, and that is where I went from the 776 on the Raritan run. While firing for Stewart Volk out of Rockaway with a 430 class engine I really learned train order operation. Single track without automatic signals was then new and interesting to one, like myself, who had been raised along a four-track, high-speed main line. Here, too, I first saw iron ore, for this was iron-mine country. Fact is, the branch had been built to reach the mines and secure their revenue traffic.

My next move was to a local passenger run out of Cranford. That morning we had No. 204, a 2-6-2 side-tank suburban type engine, which could run in either direction at road speeds. At the throttle was John Wilson. John ended many years on the regular extra passenger list, from which he had run all the fastest and best trains, by bidding in the local.

Our trip to Jersey City was routine. Then we went to Chrome with five open-platform wooden coaches, leaving at 7:12 a.m. right beside the Philadelphia express. John was delighted but we could, with the small engine, leave the terminal neck and neck and be stopped at Communipaw Station when they passed. Our trip home in the late afternoon put us off the Newark branch at Elizabethport alongside the 5:12 Philadelphia express, which passed us like a breeze.

While on this job a run of coal clogged up the netting in the front end with a tar-like residue. On one trip home John showed me how to keep the brakes released and make the time with less than 100 pounds of steam. We arrived at Cranford yard on time with the needle at 35. It took nearly an hour to clean the netting, raise steam to 90, and put the train away.

Since my promotion to the righthand side, I have been in John's position just once. On that occasion, with engine 225 over the Newark branch and a two-car train, I made Newark on time with the needle at 35. The fireman involved then is running today and loves to tell this one.

We all detested train control and the attention it requires, especially where speed restrictions seemed needlessly slow on grades where a little more swing would make the hills much easier. Many of us have since learned to appreciate it, particularly in fog which is

Nos. 173, 0-6-0 switcher (Brooks, 1903), and 625, a Ten-wheeler (Brooks, 1904), in Communipaw Yards at Jersey City in 1946.

Richard D. Fullerton, 54 S. Delmar Ave., Dayton 3, Ohio

often encountered in coastal Jersey. After passing a yellow signal and watching all the trackside marks to stop where the expected red may be seen without slipping by it, a change of the cab signal from yellow to yellow over green was always a relief.

Then too, it has saved the day for us when, after passing the last wayside signal, it has changed from green to red because a new man had inadvertently opened a hand switch. This happened to me just once while running a passenger train in the fog. That incident was enough to make me an advocate of cab signals and to accept train-speed control. We must admit, however, that the automatic air brake is still our number one safety device.

A REGULAR practice, then in swing, continued as long as coal and new firemen were used. Sometimes an engineer with a new fireman would ask another fireman, who was on his way home, to ride the engine. If the new man should run into a bit of trouble he would then have immediate help.

I could never find a fireman on his way home when my new men hit the snags. But on two occasions I got engineers to run while I went back on the tank of the Camelbacks. As for the straight engines, I could help with instructions, which were effective. The firemen were willing, maybe a bit too anxious, and a pointer here and there generally would suffice. The engineers I solicited were men I had fired for on the same runs.

Since nearly all of our engines had hard-coal fireboxes, inferior fuel could readily be used and the clinker accumulation was not too serious. In fact, some locomotives had nearly one-third of the grate area blanked off for a period and were given good soft coal. The 755, so set up, was used on the Mauch Chunk paper trian which I fired. The saving in fuel was nearly 50 percent and in labor about 90 percent. However, the fuel cost was otherwise, and good things don't last forever. Then, too the clinker and poor-coal angles could be—and often were—overworked and so was the fireman.

Each engine in the 430 and 650 classes, when used on main-line tonnage in summer, had two firemen. This custom was well on the way out by the time I got in, except for a few heavy branch runs where the Mikados could not yet be used because of bridge restrictions. This, too, was discontinued after the 1929-'31 general program which upgraded nearly all trackage.

Our Central Division had two pusher districts during steam operation. One was eastward from Phillipsburg to Hampton, the other from Dunellen eastward over Fanwood. Sometimes a Phillipsburg pusher would follow to White House, then push west to Hampton before returning light to Phillipsburg. The westward pusher generally started from Dunellen and coupled while the road engine took water at County Line, just east of White House.

Elmer Johnson, a huge man with a fat paunch, was assigned to the first-trick Dunellen pusher. The 430-class engine was always headed east because some cabooses did not have steel underframes and could not be pushed. A sight never to be forgotten was big Elmer with a 4-8-0 backward, doubleheading a Mikado, coming through the sag at High Bridge and running for the second mountain when the automatic signal went red in his face. He threw the brake valve out the window, somehow managed to go out through the rear cab door (only ten inches wide), and climbed up between the main reservoirs.

His usual way of getting in or out of the cab was via the window and a ladder, which must have been very embarrassing. The ladder, more often than not, was on a hopper or boxcar. Even I could not sit down in one of those cabs until power-reverse gears replaced the Johnson bar, and I am not broad across the beam.

Pool crews have been used in freight service to meet all fluctuations in tonnage and on some regular runs. In pool service an entire assigned crew works first in first out. The Allentown pool at Jersey City is still running with three crews, but in 1925 we had 16. The Ashley pool, which had previously run between Bayonne and Penobscot, at the top of the Ashley Planes, was called the "Klondikers." The wild stories told about those trips and the runs made between water-plugs before the 430's were superheated probably would not be believed or understood today.

THE "CHAIN GANG" at Elizabethport was another old pool. There had been 23 assigned crews before the Reading crew was harrassed when

Jersey Central train (eng. 410) ran on open drawbridge at Dover, N.J., in 1905.
All photos on these two pages from author's collection

World War 1. Each engineer had a nickname such as Otter, Sea Lion, Alligator, Baboon, and Onion, and the crews were usually identified that way —except on train orders and on the payroll. The 300-class "little coal hogs" were used on the drags and small 400's on other work. They ran anything which turned up, leaving Elizabethport with empty cars for any place where loading was in progress and returning with loads. There were potatoes in season from Freehold, oysters and cranberries from South Jersey, and coal from Hampton.

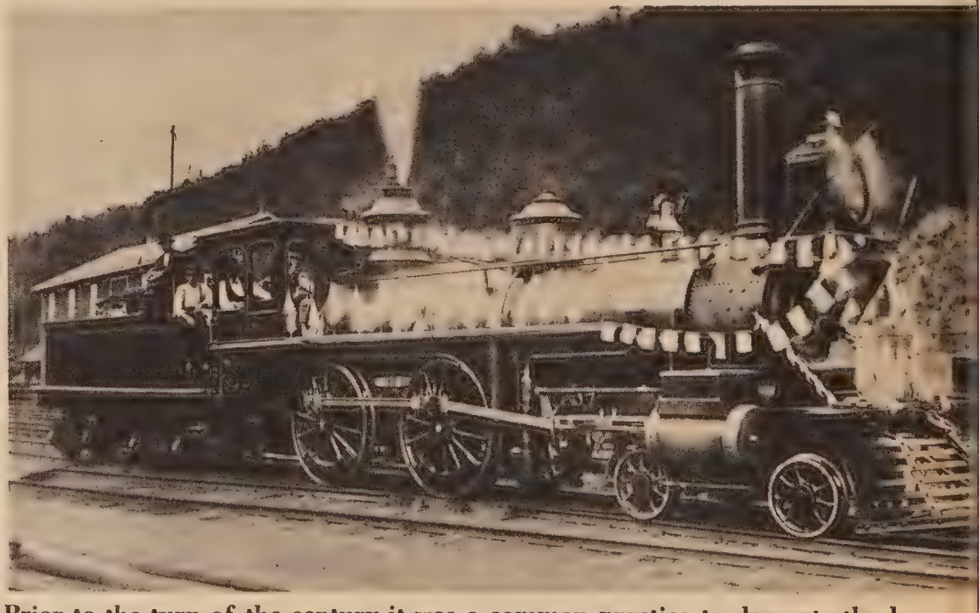
Hampton was a storage point for anthracite. Livestock and general freight were received from the B&O at Philadelphia, which was pooled to Reading or Jersey Central crews as they stood for service. Peaches were received from the old Rockaway Valley Railroad at White House. Natural ice came from Lake Hopatcong.

I began railroading near the end of the excursion era. The one-day round trip and the longer week-end excursions were fading out. They had been a delightful way of life in their day. The reduced rates and the special trains which made few stops attracted many fares. Sometimes coaches were on short supply. Now and then trains had to double the road to provide equipment for later sections. The Pennsy and Jersey Central worked each Sunday and holiday during the summer to Asbury Park and Point Pleasant, and alternately from Jersey City to Atlantic City and Philadelphia.

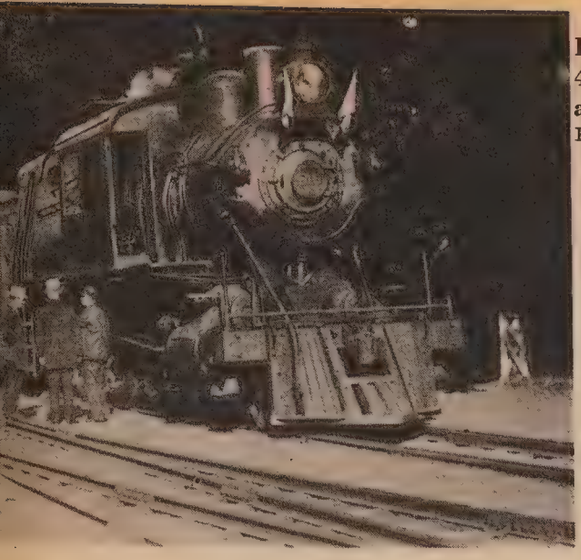
There were trips to Washington with Reading and B&O jointly in the Jersey Central service. Mauch Chunk and its "Switzerland of America" was alternated between the Jersey Central and the Lehigh Valley. These two roads, with the Lackawanna as a third con-

Fireman takes water on CNJ 25 in the Communipaw Yards. Note arrangement of footboards on a bobtail switching locomotive.

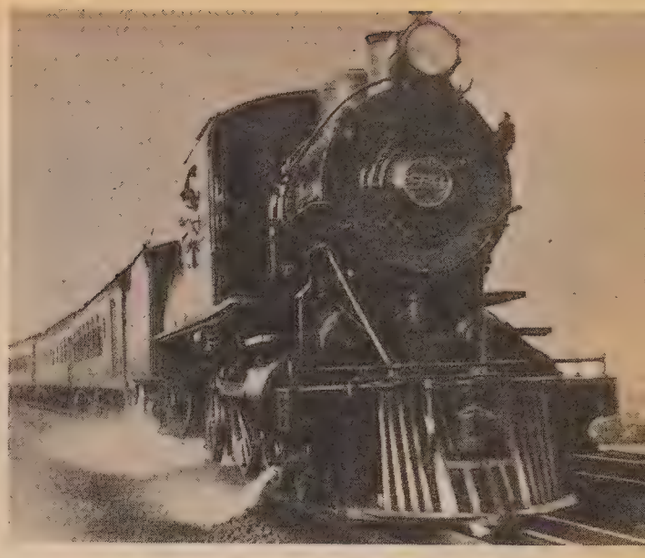
Author recalls watering engines h at Hopatcong Jct. The Morris Ca supplied water. Old tank is now go



Prior to the turn of the century it was a common practice to decorate the locomotives which pulled picnic specials. This Baldwin-built American type, shown at old Mauch Chunk, Pa., was originally No. 38 of the Lehigh & Susquehanna but was sold to the Jersey Central, which renumbered her 238.



Excursion trains with 4-6-0 engines 616 and 619 at Lake Hopatcong in 1911.
Photo by Charles B. Chaney



CNJ Camelback 590 on Philadelphia & Reading's *Royal Blue* train scooping up water at Yardley, Pa., in 1901.
Photo by J. S. Powell

tender, likewise ran excursions to Wilkes-Barre and Scranton.

It was unthinkable to ask for a Sunday off when you were on the extra list. Some regularly assigned suburban crews were marked up to run deadhead equipment from Cranford, Dunellen, or Raritan to Newark or Jersey City—and then work these Sunday excursions and return to the point of origin.

I fired a lake job with equipment out of Raritan and loading at Elizabeth, on which the total time was 25 hours, but the "hog law" was not involved and no respite was required. Our layover at the lake was from 9:40 a.m. to 6:40 p.m. We were paid for continuous time as though it was a respite.

Water was often a problem on these layovers, as not all storage sidings and water plugs were conveniently located. Then, too, with the train control used in the 1920's, the generator had to be kept running or the relay would drop out. Then the permissive 20 miles per hour indication would govern until a better indication could be picked up from a track circuit or the apparatus could be cleared on a cutout loop. It is surprising how much water was used to run that small turbo-generator, considering that it was fed through a half-inch pipe.

ON ONE of those excursions I compared the performance of Stephenson and Walschaert valve gears, with all other factors equal. The two engines involved were of the same class, but 176 had been rebuilt with Walschaert gear and a superheater while 180 had a superheater but retained its original valve gear. For two successive Sundays I fired excursions from Newark to East Long Branch with the same ten cars, the same engineer, and those two locomotives. We started from Cranford with the deadhead equipment for Newark and returned to tie up at Cranford.

The first Sunday with the 176 was routine. The laborers shoveled coal ahead during the layover at East Long Branch so that it would be within easy reach for the return trip. The following week with the 180 I did not have to open the coal-doors at all and the men at East Long Branch asked where we had taken on coal. The hogger replied that we had scooped coal at Morgan. They knew about scooping water on the fly but had never heard of this stunt and they wanted to know how it was done. They would not believe it, but there was the evidence. Less than two tons were gone from the tank and we had hauled ten cars more than 80 miles! Just a week before, they had moved more than four tons ahead for the same job.

Old steam men used to say that the Stephenson gear was the best steam distributor ever used on a locomotive. Certainly it could be hooked up closer than the constant lead gears.

My first regular assignment was firing an afternoon passenger run out of Cranford for Barney Sweeney. Goat 215 was the regular engine, a 2-6-2 side-tanker. We had a trip to Jersey City with Bayonne and New York homeward-bound commuters; then we went to Newark after getting coal and water at the roundhouse. That evening we made two main-line connections at Elizabethport—from and to Newark—taking water at Newark twice between trips. Then with a layover at Newark we got the pink edition of The New York *Daily News* and read it before the midnight trip to Cranford and our final tie-up.

In 1941 I fired for Barney on a day run out of Cranford, taking commuters to Jersey City in the morning and returning in late afternoon, with a midday trip to Matawan. My promotion came while I was on this run.

I then started running the intermediate trip and gaining experience under Barney's tutoring. With the frequent stops of that local schedule, it did not take long to get my hand in and make good station stops from medium and high speeds. I learned to use a graduated release, as he did, although our coaches were still set up for direct release. There was a great change in my feeling; I was now on my own.

The promotion exam was more or less routine. I'd had 16 years in engine service and passed an almost perfect test in machinery and air. Our road-foreman gave a bit of fatherly advice. "As engineers," he said, "you have to use ingenuity."

On a local run the following winter, on engine 773 and at below-zero temperature, with a small leak at the injector and a hollow spot in a warped cab floor, I had to use some of the ingenuity the boss had suggested. I found both shoes frozen to the floor in that small puddle. Warm water would thaw them loose, but how to apply it and where to get it was the problem. This took some maneuvering, with heavy trousers, a vest, two woolen sweaters, and a leather coat under my overalls. After all of the unscrambling, at the same time running a local passenger train, left-over breakfast coffee did the trick.

Our understanding had always been to dump the fire when water could not be found at the bottom gage-cock or a flutter could not be raised in the glass. Our new instructions were that if the crownsheet had not been weakened to point of failure, its full strength could be restored quickly by covering it with water. Put on both injectors and trust you are not too late.

Free ride: CNJ 343 on freight-house track at White Horse station, N. J.
R. D. Fullerton collection

New Jersey Central
$1.50
EXCURSION
TO
PHILADELPHIA
SUNDAY
APRIL 30, 1916
TICKETS GOOD ONLY ON SPECIAL TRAIN SCHEDULED BELOW
Leave A.M. Leave A.M. Leave A.M.
Point Pleasant 7.03 S. Asbury Park 7.29 Cape Island 7.55
Spring Lake 7.16 West End 7.33 Sea Girt 8.10
Bradley Beach 7.23 Deal Beach 7.43 South Amboy 8.29
Asbury Park 7.33 Little Silver 7.53 Perth Amboy 8.39
RETURNING—Leave Philadelphia, Reading Terminal, 5.00; Columbia Avenue 5.07; Wayne Junction 5.15 P.M.
W. G. BESLER, Pres. & Gen. Mgr.
IRA E. WHYTE, G. P. A., Asbury Park, N. J.
W. C. HOPE, Gen. Pass. Agent

Remember those long-gone excursions?
Photo by A. Q. Vogel

Opr. Smith at Lake Hopatcong Jct. has orders for Engr. Morton Maloney.

Brooks 4-6-0 passes water tower at Elizabethport roundhouse in year 1916.
From the author's collection

Jersey Central's No. 111, Class B-75, was one of the USRA's 0-6-0 switchers.
Karl Schlacter photo in Warren D. Stowman's collection

I had not been running very long when I found "big goat" 227 with an empty glass. I put on both the injector and the feedwater pump. Then I started to investigate. The blowdown cock was leaking and the crownsheet had a ripple in it around the soft-plug, but the plug held. Even that was too close for comfort. I made the trip with engine 627, a 4-6-0 with a very large fireman's hood, and was commended for having saved her boiler.

MUCH of my early running was passenger work out of Cranford, Dunellen, Raritan, and Jersey City. The trains had two to 16 cars, sometimes including one or two club cars. This was generally routine but it afforded me much experience and gave me many new firemen, nearly all of whom are now running or near the top of the firemen's roster. The engines were mostly Ten-wheelers of the 150, 600, and 750 classes. We used some Pacifics and the goats. I especially liked the Pacifics, since they could handle heavy trains with ease and had more room in the cabs.

At about this time gas rationing of World War 2 went into effect. The Passenger Traffic department gaged marvelously the needs for extra cars on most trains, but there were some misses. I ran one of the latter on a Sunday evening, train 493 from Jersey City to Raritan, with Pacific engine 828 and five cars. We could well have used 15 cars. At West Eighth Street in Bayonne, more people were waiting than had ever before waited on a Monday morning for a New York bound commuter.

After a long stop I was given two whistle blasts to start, then 4 to run slowly. At Elizabethport it seemed that all passengers got off and an equal number got on. The conductor came ahead and told me to take it easy until he changed the orders. At Roselle, forty minutes late, he gave me five whistles.

From there, I used that big engine, but with the on-and-off passengers at every station I was just able to hold to running time to Raritan.

In those years wartime freight was running heavy. Yards were congested and trains were held out on the main until a track could be cleared to take them in. In addition to many pusher jobs, I did a lot of dog-catching—that

Damaged in collision April 12, 1938, at Warners, N. J.: drill engine 16, built by Brooks in 1906, and No. 224 (in lower photograph), Baldwin, 1904.

is, relieving crews outlawed by being in service for 16 hours. I would be called to deadhead to where the crew was expected to show up just before their time expired.

Crude oil for New Jersey refineries arrived daily in tank-car trains, because of the submarine menace to marine tankers. I came in for my share of this work. The only drawhead I ever pulled was on one of these oil trains. This was also my only occasion to cut off and run for water, which was due to the delay in setting out the crippled car.

My graduation from the extra list was to local passenger service put me on a Bay Head run every second Sunday. Coming up the Long Branch road Sunday evenings, we picked up a mail pouch at each local depot and two truckloads apiece at the larger stations of Asbury Park, Long Branch, and Red Bank. After sizing up the mail situation on the first trip, I knew the spots and stopped the baggage door at the mail trucks and got over the road on time.

As you know, there are tricks in all trades. This became apparent with many local passenger jobs doing part of the work on the Newark branch. By running to Newark, then to some point west on the main line or the Sound Shore branch, the engine would be turned and run backward. It did not matter whether she was a Ten-wheeler

All photos on this page from the author's collection

Another accident on the Central Railroad of New Jersey: the 321, Baldwin vintage of 1887, knocked down a bumper block in Jersey City on August 4, 1943.

Benjamin Michaels, hostler at Jersey City roundhouse, takes on sand and coal for final day of operation of Jersey Central Camelback 751, in 1954. Lower photo shows Robert J. Kirner, Jr., firing the same engine, with butterfly doors of firebox raised as he shovels in coal. Last seven double-cab engines in CNJ service were Nos. 752, 758, 759, 763, 769, 773, and 774.

A. F. Sozio made all photos on this page especially for Railroad Magazine

or a goat, the train had to stop at the stations. I came to know both sides of the railroad and could stop accurately either way. The conductors were helpful. They would tell me which way and how much I had missed making an ideal stop.

THEN came the diesel. At first diesels were used as they became available. We were instructed on the job in their operation and road maintenance. Over a period of about 15 years, as more new diesels were put in service, the steam locomotives were retired until the transformation was completed in 1954.

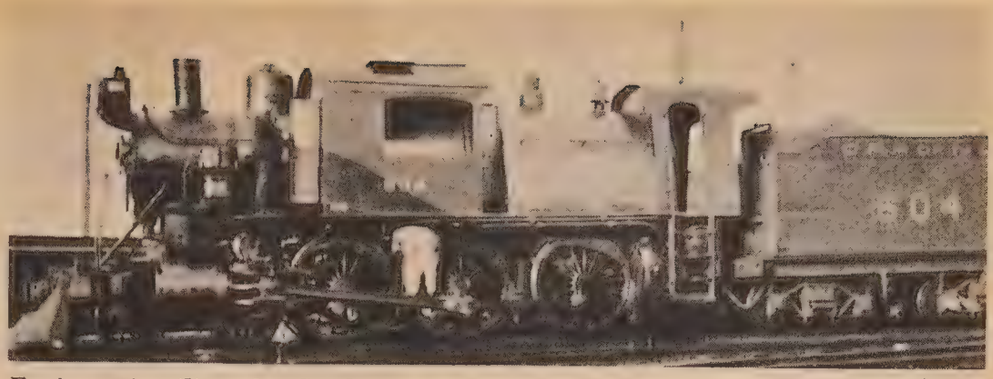
Engine 774 was held for a while and used for a few railfan specials, and the 592 was sent to the B&O Museum in Baltimore. Some Mikados rounded out their last days on transfer runs. I ran them alternately with the big 300's (0-8-0) out of Elizabethport.

On this job I was the last to run a once-glorious Pacific, the 811. When I came in that night, the roundhouse foreman said: "Put her on the ash pit! This is the end." The next day when I went to work I saw that her rods were off, and she was billed to Bethlehem for scrap. Sadly she headed west in a freight train pulled by three EMD units. What an ignominious end!

I had been back in local service for some time when the Budd cars were still a novelty. I did not run them too long, but my experience shows that they effect a large saving in short turn-around service. A locomotive with standard coaches had to be run around, watered, and sometimes turned. Today you can change ends and get out of town in about three minutes with the usual two-car consist on the Newark branch.

And now, approaching my fortieth anniversary in Jersey Central engine service, I much prefer a road-drill or transfer run to the lower-paid passenger work. The five-day week, with some overtime, adds to the attraction. Because of that and as my seniority permits, I am likely to retain in this type of work.

I hope I have had my last two-day run and slept in the bunkhouse and had coffee and cold sandwiches on the job for the last time. While there is no glamor in a road-drill run, it has its compensations in week-ends off, two good meals, my own comfortable bed at home, and equal pay in the overall. ●



Engineer is oiling the Stephenson valve gear's links and eccentrics on the old 604 (Brooks, 1902). He first spotted her with the rank pin on the front lower eighth and placed the rods in such a way that he could stand on them and reach all points with a spring oiler so that those points could be oiled at same time.
Photograph from author's collection

On July 11, 1954, ten years before he became assistant editor of this magazine, Arthur T. Knowles made this shot of the 774 on a farewell-to-Camlebacks fantrip sponsored by the North Jersey Chapter of National Railway Historical Society.

Another view of the same excursion. On the freight-only Freehold branch, the 774, making her last run, treads cautiously around the rusty wye to turn at Freehold for the return trip. Local people have come out *en masse* for the big event. Besides being the Jersey Central's last Camelback run, it is the line's final steam operation. Camelback 592 is now in B&O Museum at Baltimore, Md.
(Don Wood) Rail Photo Service, 93 Massachusetts Ave., Boston, Mass.

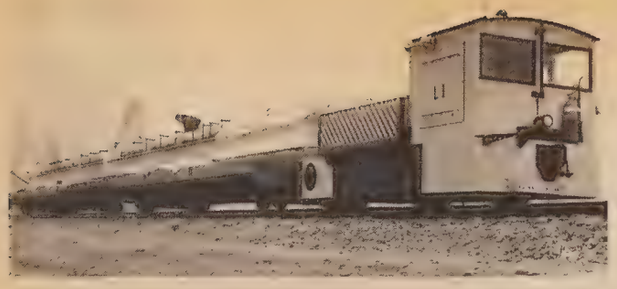


Photo by W. L. Headdy

100-foot "heat exchanger" for Los Alamos Scientific Laboratory is carried by two flatcars on the Jackass & Western.

The Jackass & Western

by PETER MYGATT

A SUPER-MODERN shortline that is fully automated is located smack in the middle of the Nevada desert.

The line is notable in a number of aspects. It is nameless. It handles no interchange traffic since it connects with no other line. It carries no passengers or crew—not even an engineer. When it highballs down the track it may be doing a whopping one mile an hour. Track maintenance is carried on by Pan American Airways.

The only thing standard about the line is the track gage.

To those who work with it, the line is affectionately known as the "Jackass & Western." The name fits, for it is a major mode of transportation at the Nuclear Rocket Development Station located at Jackass Flats, Nevada. The line's sole purpose is to aid in the testing of Project Rover nuclear rocket reactors. The train moves slowly so reactors will not be jarred during transit.

Original construction of the railway began late in 1957 to transport LASL-developed Kiwi reactors to and from the R-MAD (Reactor-Maintenance, Assembly and Disassembly) building and Test Cell "A."

The system has evolved to a total of 8½ miles of track, connecting the following facilities: the R-MAD building, Test Cell "A," Test Cell "C," the new E-MAD (E for Engine) building, Engine Test Stand No. 1 (ETS-1), the R-MAD radioactive hot dump, and the R-MAD decontamination facility.

The line also transports NERVA (Nuclear Engine for Rocket Vehicle Application) reactors developed by the industrial team of Aerojet-General Corp. and Westinghouse Astro-nuclear Laboratory, and will transport LASL's advanced reactors known as Phoebus, the first of which will be tested during mid-1965.

Nuclear rocket reactors on test cars are moved to the test cells by a remotely-operated, radio-controlled, electric locomotive. After the test series with the reactor has been completed, the locomotive travels to the test cell, picks up the test car with its reactor, returning them to the R-MAD disassembly bay where the reactor undergoes post mortem operations.

The 40-horsepower, four-wheel, battery-powered locomotive, designated L-1, was built for NRDS during 1957-58 by Greensburg (Pa.) Machine Co. (now merged with National Mine Service Co.).

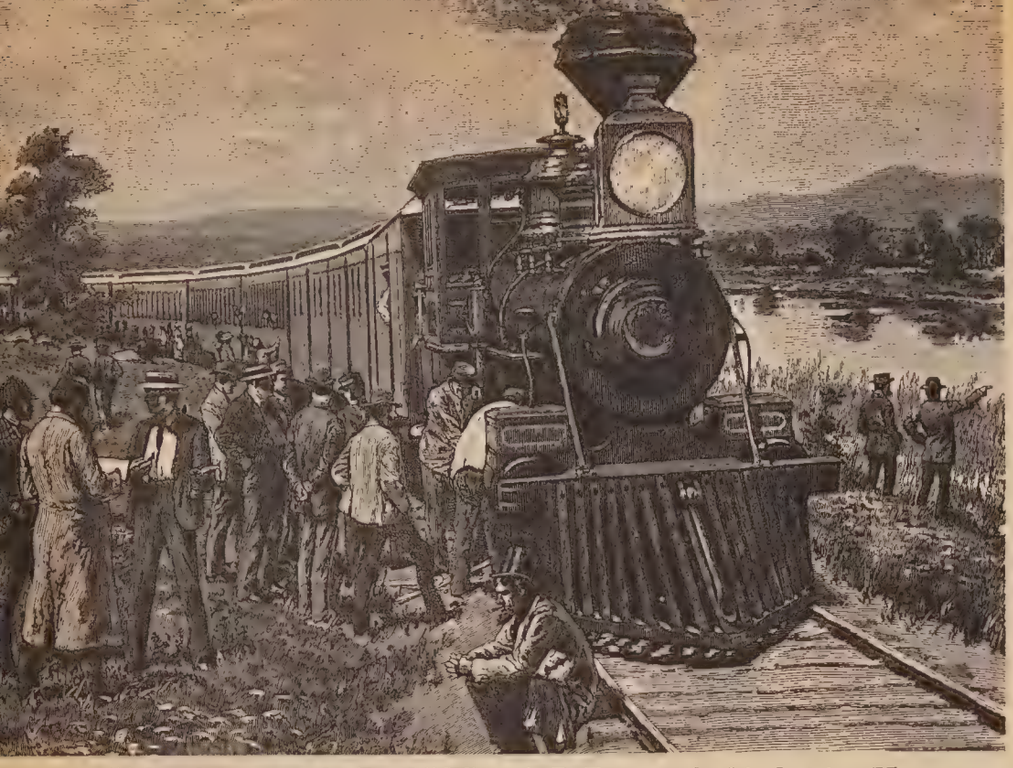
Later a small former Air Force four-wheel diesel engine, built by General Electric, was obtained for the Jackass & Western from a Utah supply depot. This engine, carrying the number L-2, is used for switching on the short line. Its speed is somewhat faster than the L-1. A track maintenance motor car is designated L-3.

Other rolling stock includes a diesel-powered (not self-propelled) railroad crane with a 25-ton rating which is used to right derailed cars; to move 22-ton lead fuel element shipping casks; and to perform miscellaneous maintenance jobs; three dump cars, six flat cars, and seven test cars which have hauled all the reactors.

All rolling stock is operated by ACF Industries, Inc. ●

Courtesy of The Atom (magazine), Los Alamos Scientific Laboratory

(Upper photo) In the foreground we see a small GE diesel, designated L-2, idling on the Jackass & Western track while, in the distance, the battery-powered and remotely-controlled locomotive L-1 (also pictured in photo below) is transporting a nuclear rocket reactor toward the test cell that is barely discernible in the upper left corner.



"A breakdown on the Road." When A. B. Frost made this drawing 75 years ago the railroads of America had an almost complete monopoly of travel by land.

RAIL PASSENGER SERVICE NEEDS POSITIVE THINKING

by Cleland B. Wyllie

BING Crosby made famous a song which stresses the need to eliminate the negative and accentuate the positive.

Emphasizing the positive is a necessity today when you look at railroad passenger service. The negative has been in the forefront too long. Gloomiest period was back in September of 1958 when an Interstate Commerce Commission examiner, Howard Hosmer, predicted:

"If railroad passenger-miles (other than commutation) continue at the average rate of reduction between 1947 and 1957, the parlor and sleeping-car service will have disappeared by 1965 and the coach service by 1970."

Overlooking the "if," the nation's mass media rushed to proclaim the imminent death of rail passenger service. The report came out at a time when the whole railroad picture was pretty gloomy.

Revenue passenger-miles had skidded from a peak of 98 billion in 1945 to about 23.2 billion in 1958. In the meantime, the nation's airlines, encouraged by Government policies favoring the lowest possible fares, had been scoring tremendous gains, and motorists were taking to the highways in greater numbers.

The freight situation also was gloomy. Revenue ton-miles were down to 551.7 billion in 1958, well below the 588.6 billion in 1950. The railroads' freight business was slipping.

Adding to the woes was the Post Office Department substituting trucks for trains in handling mail and in airlifting sizable amounts of regular first-class mail. Loss of the mail meant the end for many a passenger train in the 1950's.

More pessimism was created by the ICC's famous full-cost formula for figuring passenger costs. This formula charges passenger service with a portion of all costs for maintaining tracks, signals, yards, and other physical properties which would have to be continued even if all passenger service ended.

This ICC formula continues in effect today. It still produces a huge deficit, although many railroads operate trains at a profit on an out-of-pocket cost basis.

Back in 1953, the ICC fully-allocated formula showed a deficit of $670 million while the direct-cost loss was only $1 million. The ICC deficit peaked in 1957 at $723.6 million (it was back down to $398 million in 1963) while the direct-cost deficit soared to $113.6 million. Those soaring deficits prompted the ICC study which produced Mr. Hosmer's 1958 prediction.

So what has happened since 1958 to call for positive thinking?

Despite all the negative thinking since 1958, railroad passenger service is still big business. In 1963, for example, travelers, shippers, and the Post Office Department paid out over $1 billion for the use of passenger trains.

The rate of decline in revenue passenger-miles has been slowed up so much that you can even hear some railroad presidents talking about an upturn.

R. S. Macfarlane, president of the Northern Pacific, says: "I do not foresee an end to passenger service. As a matter of fact, I feel that the trend from today's present low point can well be upward."

Bolstering his optimism is the fact that NP last year handled twice as many long-haul passengers as in 1950. It is heartening to report that NP's revenues were up 5.5 percent in 1964, and a 6.5 percent increase is predicted for 1965.

The Illinois Central's passenger traffic manager, E. L. Holmes, says that his road "has no thought of going out of the passenger business, as long as we can attract a sufficient number of travelers to make our trains pay." The IC hasn't discontinued a train for the past five years.

MOST optimistic of all is John W. Barriger, chairman and chief executive officer of the Katy, who predicts a tenfold increase in passenger business provided the railroad merger movement is expedited to permit transformation of the present primary main lines into super-railroads.

"Only super-railroads, capable of operating at vastly higher speeds, can revitalize the railway passenger service," he says. "Super-railroads can be achieved with modernized work rules, consolidation, and equality of competitive opportunity in rate making. The last is necessary in order that rail transportation prices shall be established by competition and not by regulation.

"If these basic reforms can be made, I can foresee development of 25,000 miles of super-railroads within the next decade. The consequence of super-railroads would be a tenfold increment in passenger transportation."

Barriger believes that the best way to accelerate the creation of super-railroads, would be to merge the entire rail mileage of the United States into two great transcontinental systems. Each system, he states, should be well balanced in size and traffic as well as operating potentials and each should serve all principal points in the nation.

But the mass media continue to emphasize the negative side. For example, on Sept. 26, 1964, *Business Week* said the New York Central's *20th Century Limited* was no longer an all-Pullman train.

What *Business Week* could have reported was that the *Century* hasn't been all-Pullman since 1958 but has been completely refurbished, the dining car service upgraded, and the train, in general, restored to its past glory. Even though it carries coaches and sleeper coaches, the *Century* has made a brilliant comeback, contributing revenue and prestige to its railroad.

In fact, today's passenger has a surprising number of trains that make travel a real pleasure. Besides the NYC's *Century,* there's the Pennsylvania's *Broadway Limited* between New York and Chicago; and the Baltimore & Ohio's *Capitol Limited* is still a superb train between Chicago and Washington-Baltimore, to mention only a few.

Intense air competition doesn't stop the Atlantic Coast Line or the Seaboard Air Line from offering well-patronized de luxe service to Florida from New York-Washington, topped by ACL's extra-fare *Florida Limited* in the wintertime.

Travelers in and out of Chicago are most fortunate. Besides trains to eastern points there is excellent service south and west.

Topping the list—and this writer's nomination for No. 1 train in the country—is the Santa Fe's *Super Chief,* which offers an incredibly smooth ride in under 40 hours between Chicago and Los Angeles with excellent Fred Harvey dining service. *El Capitan* boasts hi-level coaches on a similar schedule.

High, too, in popularity is the Illinois Central's *Panama Limited* to New Orleans, which also features meals for the gourmet. The Burlington's tracks provide the route for several superfine trains, one of which is the road's own *Denver Zephyr.*

The Burlington also operates the Northern Pacific's *North Coast Limited* and the Great Northern's famed *Empire Builder* between Chicago and the Twin Cities, where the trains are switched to their respective lines to continue on the way to Seattle and Portland.

CB&Q likewise is involved with the Denver & Rio Grande Western and the Western Pacific in operating one of the nation's most popular trains, the *California Zephyr,* between Chicago and San Francisco.

The Union Pacific has a contender in its *City of Los Angeles* which reaches Chicago over tracks of the Milwaukee Road. Across the border, the Canadian National is keeping two top-flight transcontinental trains in service and between Chicago and Toronto, the CN-Grand Trunk Western's *International Limiteds* have held high ranking for over fifty years.

IN THE EAST, less optimism prevails. The Chesapeake & Ohio offers top quality. But competition from Interstate Highway 96 has forced C&O to reduce train service between Detroit and Grand Rapids, and its *Sportsman* out of Detroit to Norfolk, Va., could use a lot more passengers.

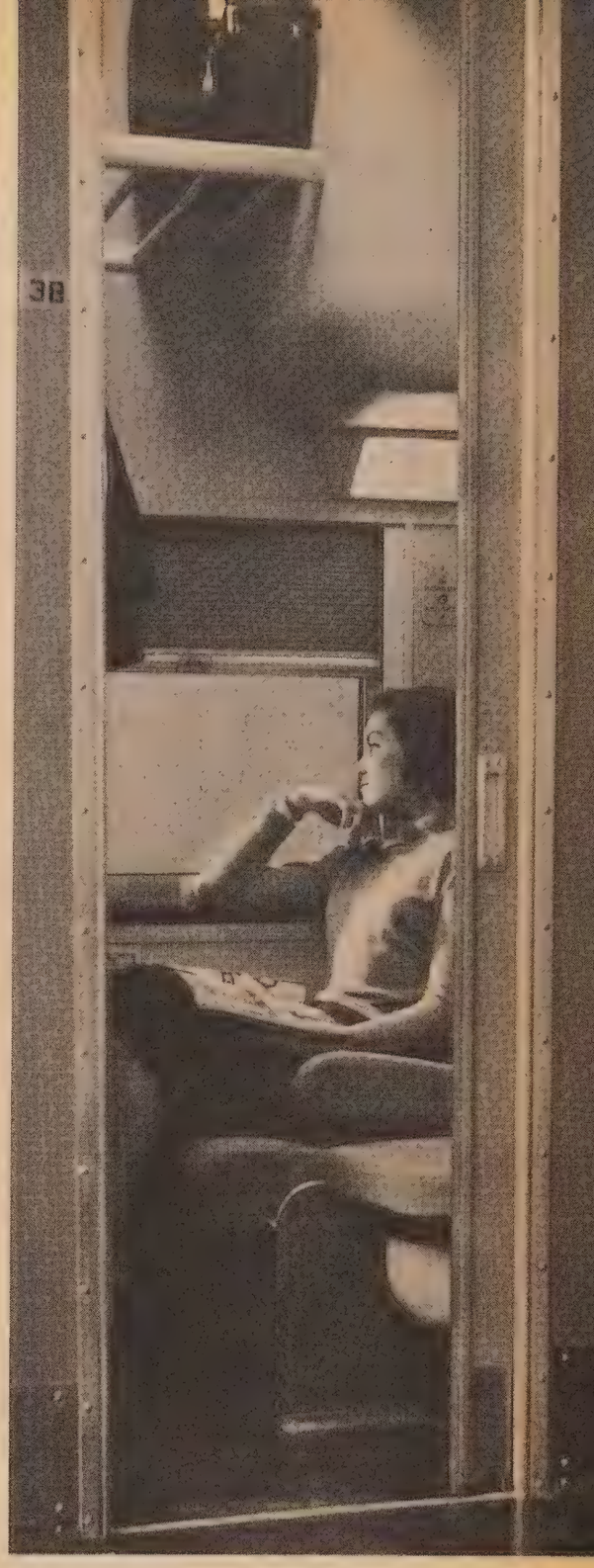
The C&O and B&O are now closely allied and are engaged in a do-or-die effort to stay in the passenger business.

Two roads scheduled for merger, the Pennsylvania and New York Central, present a mixed picture. The Pennsy has kept its *Broadway Limited* on a quality basis throughout the entire post-World War II period. Now it seems to feel there is future business to be gained in the Washington-Philadelphia-New York area, although some reduction in service elsewhere on the Pennsylvania system may be expected.

The New York Central has spent sizable sums to upgrade equipment, to expand sleeper-coach service and upgrade dining car service. Efforts to improve courtesy to passengers are being vigorously pursued.

The Central is taking a "realistic" attitude toward passenger service and will offer such service wherever and if the public shows a willingness to support it.

However, the Central's management continues to issue pessimistic statements which give added emphasis to a public impression that the road really wants to pull out of the business. There seems little hope that the NYC will try incentive fares or other inducements to woo travelers from the highways.



The lady has privacy on a Baltimore & Ohio all-room sleeping coach. Other railroads provide equivalent services.

Security analysts are notorious for their aversion to passenger service. Some of these experts expect this service to end as equipment wears out.

Here the Santa Fe offers hope. Last year it invested $10 million to buy 24 new hi-level coaches and to rebuild 12 roomette cars into virtually new all-bedroom cars.

It is Santa Fe policy, says Ross E. Chappel, general passenger traffic manager, "to offer the best possible service in the latest type of passenger equip-

ment." This policy will continue if the public continues its support.

Like other Western roads, the Santa Fe is overloaded in the summer months and during the Christmas holidays. In an effort to attract off-peak travel, the AT&SF pioneered in reduced round-trip fares in the winter of 1963-'64 and again has such fares in effect from mid-September of 1964 through April of 1965.

Santa Fe's revenues increased 2.3 percent over 1963 and the number of passengers was up a healthy 5.3 percent.

Reduced fares in the off-peak season plus sizable amounts of new equipment are featured by the Union Pacific. The UP bought 20 new coaches in 1961, added 15 more last year, and is upgrading some of its Pullman cars.

TWO recent Government actions offer encouragement. A report has given recognition to the fact that rapid-transit problems in the Washington-New York-Boston area can be attacked through rail service at less expense than by expanding other forms of transportation.

The General Accounting Office slapped the wrists of the Post Office Department, charging that "unnecessary costs were incurred . . . in airlifting first-class mail when reasonably adequate surface transportation was available." This isn't likely to put mail back on the trains but it vindicates the railroads' claims about the airlift project.

Biggest source of optimism is the resurgence of freight traffic following 1958 legislation which eased slightly some long-standing restrictions on rail pricing of freight service. Revenue ton-miles in 1964 climbed to a post-war high of 665 billions, a big jump from 621.7 billions in 1963 and surpassing the previous post-war high of 655 billions in 1947.

The 1958 legislation has prompted a tremendous surge in piggyback, the return to the railroads of sizable quantities of new automobiles, and a big growth in unit trains.

Unit trains are solid trainloads of one commodity. They are saving utility companies up to $1.50 per ton on coal. Grain was hauled from Duluth to Buffalo during the winter in 1963-'64. There's a big potential market in the handling of all bulk commodities.

Freight traffic's brighter vista helps the passenger outlook. Roads with sizable sums in the till look with more favor on the public relations values of good passenger service. Imaginative marketing by several roads provides more reasons for optimism as well as possible patterns for others to follow. The B&O, Canadian National, and CB&Q are good examples here.

Since April 13, 1964, the B&O has been experimenting with incentive fares as part of a big do-or-die program. Paul H. Reistrup has been given a free hand to eliminate the road's direct-cost passenger deficit.

He started by making big cuts in first-class fares and Pullman space charges on Mondays, Tuesdays and Wednesdays. On Oct. 25, 1964, coach fares were cut on the same days.

B&O equipment is being upgraded and dining car service is getting lots of attention. First-run movies are being shown to passengers on the *Capitol Limited* and *National Limited*. Initial results with the first-class fares were most encouraging. If the upturn continues, B&O will stay in the passenger business.

THE CANADIAN NATIONAL's intensive battle is aimed primarily at getting people out of their automobiles. CN introduced its revolutionary "Red, White and Blue" fares east of Montreal in 1962, and later expanded them to transcontinental service.

These fares are all lower than previous fares but use supermarket strategy in offering lowest fares at times when rail travel normally is lowest. Thus the Blues, which are the highest, prevail on Fridays and Sundays, peak travel days. The Whites, next lowest, prevail on other days of the week in the summer; and the Reds, the lowest, are in effect on days other than Friday and Sunday during the winter.

Refurbished equipment designed for maximum passenger comfort has been put into service. A second transcontinental train went into service for the summer season in 1964 and continued for the winter.

Unlike programs on some railroads, the CN's is gaining momentum. Over 700 passenger cars are being rebuilt or refurbished for the 1965 summer season. Revenues were up 19 percent last year over 1963.

The CB&Q rates as one of the truly passenger-minded roads. Burlington's management is happy when trains cover direct costs and it doesn't drag out ICC figures to claim heavy passenger losses.

"We think the out-of-pocket basis is a realistic one for computing passenger train performance," the Burlington's Al Rung reports. "The out-of-pocket net for the first half of 1964 was $3.5 million as contrasted with a 'war-debt deficit' on the fully allocated cost basis."

The Burlington features first-class equipment, reasonable fares, good dining car service, courteous treatment of passengers, and an aggressive sales campaign to obtain "creative travel." One-day, week-end or week-long trips, attractively packaged and modestly priced, are boosting Burlington passenger revenues.

Travel agencies are beginning to find gold in promoting rail travel. One of them in New York City (Four Winds Travel) marketed five "Americana Rail Cruises" last summer. These were 23-day all-expense trips at an average fare of $1,200. More than 500 passengers paid this price. As a result, additional trips have been scheduled this year.

Management could help the passenger outlook by accepting the out-of-pocket formula. The figures on this subject as produced by Standard & Poor's Corporation are interesting.

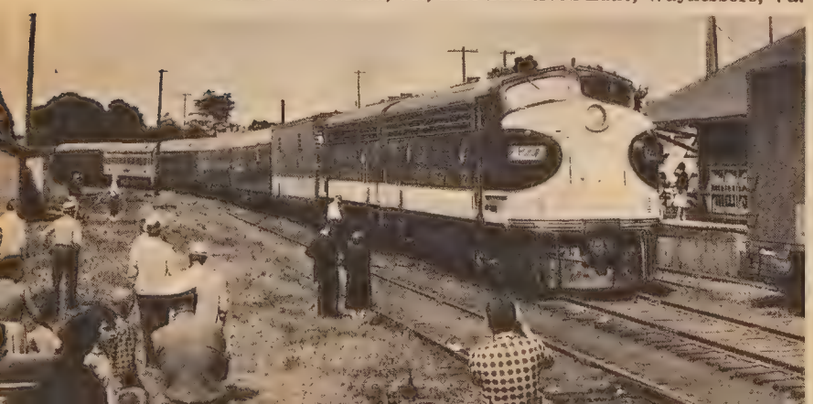
In 1963, S&P shows the New York Central had a net of $8,991,00 on a direct-cost basis versus an ICC formula deficit of $14,265,000. The Santa Fe had an ICC deficit of $32,927,000 as against a direct cost net of $1,147,000.

So there are reasons why the passenger-train picture is brighter now than it was in 1958. Yet there is obvious need for prompt action both by the Government and rail management.

MOST obvious is the need for an overhaul of the nation's transportation policy. The myth that the railroads are outmoded must be dispelled.

The Federal Government's Department of Justice has been opposing the rail-merger movement. The ICC, however, has been moving ahead in this field. So there may be a merger of the Seaboard Air Line and the Atlantic Coast Line as well as a combined Burl-

William E. Warden, Jr., 1216 Shamrock Lane, Waynesboro, Va.



***Shenandoah Valley Special* of the Southern Railway is pulling into Harrisonburg, Va., known as "world's turkey capital."**

ington, Great Northern, and Northern Pacific. And the report of ICC examiners indicates that the Pennsy and NYC may become one. Mergers provide hope for the continuation of passenger service.

James A. Lyne, the editor of *Railway Age*, thinks that the long-haul passenger business will survive only if it gets the type of treatment that commuter service needs. This includes relief from taxes and relief from "full crew" laws in many states. Also low-cost loans and other concessions, enough to permit and justify economically the purchase of new equipment.

Says he: "Railroad passenger service, as I see it, has to be treated as a public utility."

Frank Richter, publisher of *Modern Railroads*, regards the future as "very discouraging" because the public tends to put the train last in selecting a mode of travel and because development of service attractive to the public requires far more capital than seems available.

But he believes there is great opportunity in the passenger field, especially in the urban area.

"In the long-haul (inter-city) area," he says, "there is limited opportunity. It doesn't need any Governmental rules. The newer approaches to marketing freight service could be the answer here, too. By that I mean aggressively tailoring, pricing, and merchandising services suited to the nature of the particular service areas."

JAMES SITES of the Association of American Railroads has some sobering thoughts for those who are impressed with Europe's passenger services. He points out that all European roads are nationalized.

"If U.S. railroads were operated under the same cost conditions as European counterparts," he says, "they would, first, be receiving from the Government some $2 billion to offset operating losses, and would, second, not be paying more than a half billion dollars each year in taxes.

"U.S. railroads are not asking for this kind of handout. But they do ask for an end to Government policy inequities that sometimes seem diabolically designed to sidetrack the passenger train forever."

Sites urges putting all commercial carriers on an equal cost and tax basis by: (1) curtailing "wasteful Government spending programs for air, road and water facilities and coordinating such investment planning in a centralized Federal office, (2) putting all transport development programs on a self-supporting basis through adequate user charges, and (3) eliminating or sharply reducing property taxation on railroads.

The railroads face a problem in getting people back on the trains. It would help if they would unite and finally recognize that their common enemy is not other railroads but the automobile. Thus the B&O, the CN, and the Santa Fe, in offering fare incentives, seem to be moving on the right road.

There is too much trouble for a prospective passenger to get information. Family fare plans differ in the East and the West but do not exist at all in the Southeast. This lack of uniformity tends to confuse travelers.

Ticketing processes need simplification. The cumbersome tariffs which have to be researched to find fares for inter-line travel have needed overhauling for decades.

One big problem, transfer of luggage, has been solved by baggage carts now available at most big terminals. But the terminals themselves need attention. More comfortable seats and better ventilation (if not air-conditioning) would please the passengers.

To summarize, the fate of rail passenger service hinges upon action on three fronts:

(1) The public must show it wants the service by supporting good passenger trains.

(2) Federal, state, and local governments must treat the railroads more equitably.

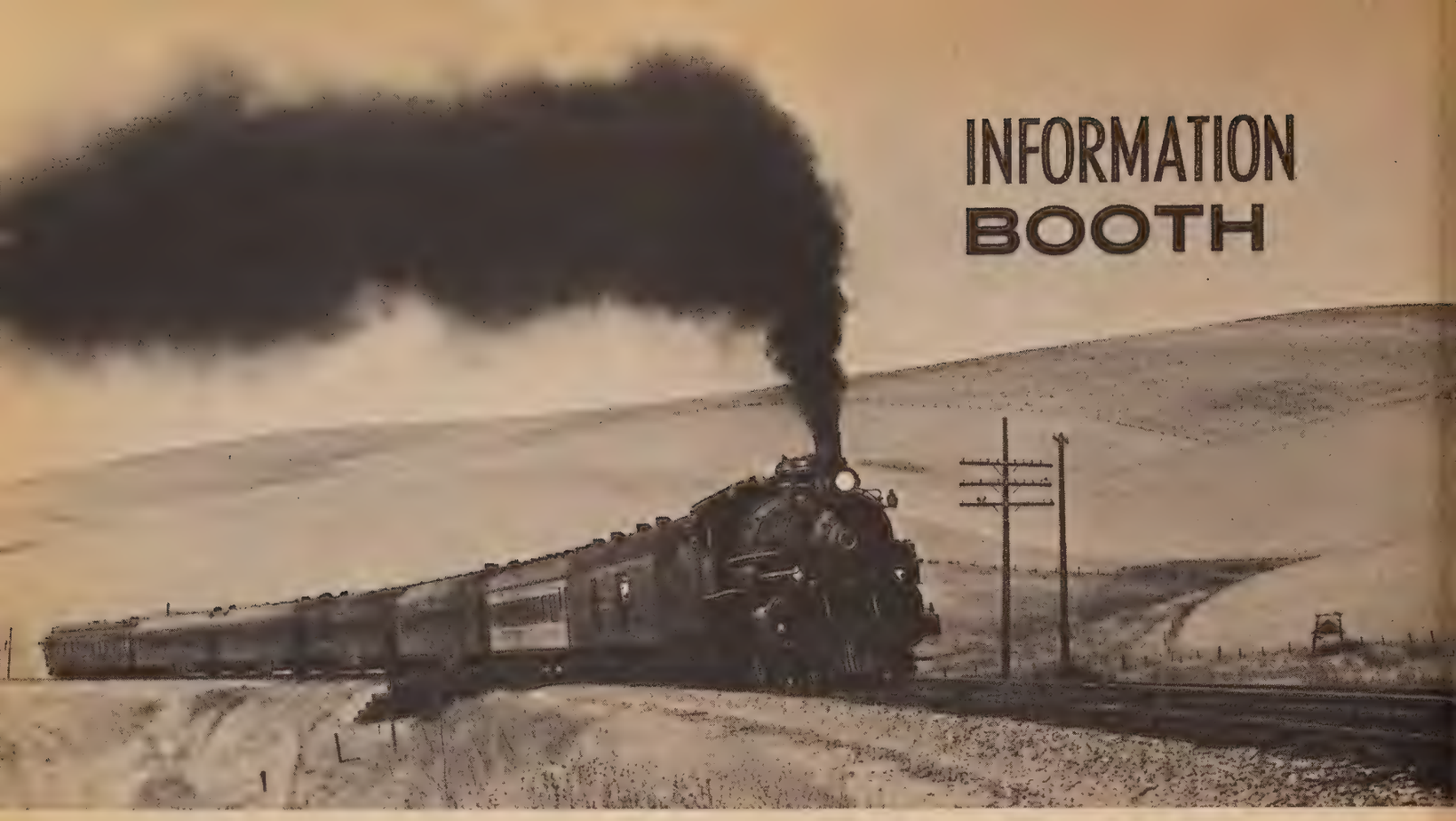
(3) Rail management must show more aggressiveness in improving and selling passenger service.

While the overall outlook for passenger trains is a trifle brighter now than in 1958, it wouldn't take much to turn back to a "negative outlook". If that were to happen, Howard Hosmer's dire predictions could prove true after all, but with a change in the dates when service may end. ●

To please passengers in the *Empire Builder's* six Dome lounge cars, the Great Northern has updated its sound systems by installing new cartridge-type magnetic tapes and a play-back device. Ken Dornfield demonstrates ease of loading new cartridge tapes.

Santa Fe streamliner in Cajon Pass. Eastbound mainline curves off to the left.

INFORMATION BOOTH



June 7, 1959: Western Pacific No. 94 grinds up Altamont Pass in California beneath a long plume of dense black smoke.
Bart Gregg, 1371 31st Ave., San Francisco 22, Calif.

1 *Many railroads, I know, used to paint engineers' names on the sides of their steam locomotive cabs. Was a similar practice ever followed with conductors' names on cabooses?*

Yes. An oldtimer says this was done long ago on the Southern Railway. We queried the Southern's public relations official, B. E. Young. He recalls having heard some mention of this practice but he has no definite information to confirm it. Can any reader shed light on this subject? It came up in connection with the manuscript of Bill Knapke's book on caboose lore, which we understand is now being edited for publication. According to Vergil Greene, a retired Southern general foreman, his road followed this practice with conductors having at least 25 years' seniority. A man was assigned a caboose, which he treated as if he owned it. While it was in the car shops for repairs, he laid off work.

Another caboose item that Bill Knapke puts up to our readers is this: the late Casey Jones's widow said that cabooses of Illinois Central conductors killed in train wrecks were draped with black for a 30-day period. Can any oldtimer or historian tell us about caboose-draping on other roads?

2 *Expain the unusual position and angle of the whistle on an old 4-4-0 Katy switcher, series 101-110.*

We have no picture of this. The M-K-T chief mechanical officer tells us that the whistle on this class was screwed into an elbow that jutted from the side of the steam dome, with the whistle leaning toward the front of the engine.

3 *I have an old poem, "In the Cab of the Westbound Mail." Who wrote it and when?*

O. Earl Lyles, a Western Pacific engineer, in 1932. We reprint it for the benefit of other readers.

Oh, come take a trip on my iron horse
Tonight with the westbound mail.
Come see the ghosts on the canyon wall
As we roar down the winding trail.
Sit here by my side as the miles flip by
To the purring song of the stack
While we careen at a sixty clip
And green lights wink by the track.

Come ride in the cab, see the shadows dance
In the stabbing rays of the light
While ripples on the stream below
Lend a romantic thrill to the night.
Lean out in the breeze, see the towns whip past
And gaze on the endless rail.
Oh, yes! We'll be on time tonight
As we ride with the westbound mail.

That structure ahead is Pitt River bridge,
High up in the Sierra Hills
Out across Bogard Flats we will romp
And down past the Red River mills.
We'll skim Lake Almanor's blue-green shore,
Through Feather River Canyon sail,
Clock Greenville and Keddie right on the dot
On time with the westbound mail.

It's nice to lounge back there in a coach
Where one can relax and rest
As the big Pacific type leads you on
Through the night and into the west
But ride up here on the business end
As we roar down the WP trail;

ASK BARBARA: **Railroad questions are answered here by our reserach expert—as many as space permits. Top priority is given to subjects of general interest. Address Miss Barbara Kreimer, *Railroad Magazine*, 205 E. 42nd Street, New York, N. Y. 10017. No replies are sent by mail.**

You'll get the thrill of your lifelong dream
When you ride with the westbound mail.

4 *Give me a brief history of the Wilkes-Barre & Eastern.*

Chartered in 1892, it was opened in '93, and has always been controlled by the New York, Susquehanna & Western, and at one time operated trains over the NYS&W into Jersey City.

5 *What is the difference between a fire-tube boiler and a water-tube boiler on a steam locomotive?*

In the former, the water circulates around fire tubes from the firebox to the front end. Hot gases and smoke are forced through those tubes by the exhaust. But in a water-tube boiler the water circulates through the tubes, while the hot gases and smoke surround it. The latter type was used very little in the United States.

6 *How much tractive effort by a steam locomotive is required to pull a train of five fully-occupied steel coaches 45 miles per hour?*

Much depends upon the grades, curves, and weather. Under ordinary circumstances, the train could easily be started by a passenger engine with a rated tractive effort of about 30,000 pounds. Such an engine develops anywhere from 8,000 to 16,000 tractive force at 45 mph, depending upon the amount of her heating surface. However, in order to pull the train easily she should develop about 9,000 pounds of tractive effort.

7 *I often see freight cars with* GATX *painted on the side. What does that mean?*

It means: the car is not railroad-owned but belongs to General American Transportation Corp. These letters are so familiar to railroad and shipping men that the company itself is often referred to as GATE-X, and this year General American has included the lettering in its new corporate mark.

The origin of all this is interesting. In 1896 the Duquesne Brewing Co. of Pittsburgh, Pa., sought to buy 20 second-hand refrigerator cars. Max Epstein, who worked for a provision firm in the Chicago Stockyards, heard about it and contacted the superintendent of a packing-house "reefer" line which was about to scrap 48 old cars. The super agreed to sell them for $400 apiece, and pay Max $50 commission on each sale. Here is Max's version of the story:

The Duquesne people were to come to Chicago several weeks later. I kept their letter in my pocket and often read it. One day I had a hunch. The letterhead was ornate and colorful, with a big "D" for the name. I got the idea that those people were vain and that if they could see all this on a car it would impress them.

So I asked the packing-house people to paint a car exactly like the letterhead. Eventually the brewers came to Chicago. The car had been cleaned, painted, and set aside. I took the visitors to the stockyards through the entrance where I knew they would see it at a distance. One of them said, There's our name on a billboard," which was what it resembled. They liked what they saw and we made an easy sale.

As an outgrowth of this incident, Max Epstein and other men incorporated General American in 1902. The company now leases and services about 66,000 freight cars, particularly tank cars, throughout the United States. Shipping companies use most of these cars; many are sold to railroads. The tank cars, including a 32,800-gallon giant, are built at Sharon, Pa., and serviced at Gate-X maintenance shops all over the country. These cars are tailored to the loads they transport: just about every kind of liquid lading, even chemicals and wine, difficult-to-load commodities like wheat flour, and piggybacking.

8 *I have an old lantern initialed NYP&O RR. Which railroad?*

New York, Pennsylvania & Ohio. This standard-gage line, sometimes called the Nypano, was chartered in the three states. It ran from Salamanca, N.Y., to Dayton, Ohio, 390 miles; from Buchanan Jct., Pa., to Oil City, Pa., 33.78 miles, and from the Youngstown & Austintown Ry. at Youngstown, Ohio, to Leadville Mines, Ohio, 5.96 miles. Total 429.75 miles. From the very first, the Erie operated it under a lease dated March 16, 1896. Now part of the Erie-Lackawanna system.

Raceland Car Shops men put finishing touches on some of the 200 Cushion Coil cars which have since gone into service on the C&O and the B&O. Each car has a capacity of 100 tons, compared with 70 tons on previous cars. Each one has a special loading trough to cradle the steel rails and to act as shock absorbers.
Bill Girgash, editor, Chessie-B&O News

9 *Short history of Tuckerton Railroad.*

The standard-gage Tuckerton was incorporated March 26, 1866, in New Jersey, was opened Nov. 1, 1871, and was reorganized in 1880. It ran between Whitings and Tuckerton, 29 miles. On May 1, 1909, it began an additional operation under agreement with the Philadelphia & Beach Haven Railroad between Manahawken and Beach Haven, 12.14 miles. Automobiles forced the line to abandon in 1936.

10 *Did the Maine Central ever operate 0-6-0 Camelback switchers?*

Yes. So did the Portland Terminal Co. Built by Manchester, they were, so far as we know, the only Camelbacks owned by all-New England railroads. Richard A. Hoisington, 6 Park Ave., Derry, N.H., tells us that some (maybe all) Maine Central center-cab engines eventually went to the PT. The PT's own Camelbacks, built somewhat later than the Central's, were heavier.

11 *Do you have the words of a poem entitled "Silver Rails"?*

Yes, it was written by E. Glendenning and is reprinted from *The West Virginia Hillbilly*.

I fell in love with a railman;
Riding the trains was his line.
So brave and handsome, so kind and true,
He stole this heart of mine.

He asked that we should be married
And promised we'd never part;
Now I'm his wife; for the rest of my life
Silver rails will be in my heart.

Silver rails that gleam in the moonlight
Are taking my loved one away
And I am so lonely while he is gone.
Will it always be this way?

But then he returns the day after tomorrow
And I shall be happy again.
Silver rails shine for that sweetheart of mine
And bring him home safely to me.

Running Extra

We said the Pennsy's *Spirit of St. Louis* lost its identity last Oct. 25th, being consolidated with another train, *Penn Texas*. That statement was premature. The *Spirit* is still operating. In fact, it received a year's reprieve with an ICC ruling last Feb. 23rd which required the train to run one more year in daily operation, according to A. D. Chase, PRR sales representative, 420 Washington St., Dayton, Ohio 45402.

"Wanted: a short history of the narrow-gage Connotton Valley RR., now part of the Wheeling & Lake Erie." writes W. P. Grant, 323 University Ave., Oxford, Miss. 38655.

"I seek a copy of the poem entitled 'The Monon Wreck,' by James B. Elmore, an Indiana farmer," writes C. E. Rutledge, retired engineer, Box 745, Brundidge, Ala. 36010. He recalls one verse of it, as follows:

And in among the wreck I see
A man pinioned down by the knee
And hear him calmly call to say:
"Cut, Oh cut my leg away!"

Mr. Elmore has a greatly enlarged builders' photo of LS&MS 2-8-0 engine No. 1000, built by Alco-Brooks in 1903, serial number 28788. He wants to hear from other readers who have giant-size builders' photos such as those which used to hang on roundhouse walls.

Our March '65 issue carried a photo of a television show on the Atlantic Coast Line, captioned, "First time in history: TV installed on a train for passengers." This item is questioned by Herbert T. R. Mason, 1064 Beverly Pl., Victoria, B.C. Canada, who writes:

"I am under the impression that when TV was in the experimental stage some sets were installed on crack English trains. Can you verify this?"

We have asked British Rail for verification and will publish their reply when we get it. Our correspondent traces his interest in railroading partly to his grandfather, Richard Mason, who broke a record by being superintendent of the Furness Railway in England for 50 years, retiring at age 80.

Herbert's father, Thomas Mason, was superintendent of two different railways in turn: the Brecon & Merthyr in Wales and the Windsor & Annapolis in Nova Scotia, Canada. Later he served as outdoor superintendent for George Westinghouse, air brake inventor. He showed Grand Trunk employes how to install and operate the first air brakes used on GT trains.

A comment on April item 3 comes from C. F. Spitzer, Box 202, Fairfield, Va. 22030, with regard to air horns on steam locos: "In 1925, when the Southern Railway put Pacific types of the 1200 series on branch lines, it assigned one of those Pacifics to Engineer John Rowan on the Manassas-Harrisonburg branch. She carried an air horn for use when entering a village or town. Later, air horns were placed on other locos of the same series on that line."

Bill Pennington says: "The most important reason why some roads used both steam and air whistles was because the air horn directed forward usually could not be heard when whistling out or calling in the flag to the rear. Diesels such as F-7's had two horns, one directed to the front, the other directed to the rear. Geeps, as a rule, have 3 of their nest of horns directed forward and 2 directed backward."

An addition to our Copper River & Northwestern history (May issue) comes from E. Harper Charlton, 4503 Claycut Rd., Baton Rouge, La. 70806. This was Alaska's second longest railroad, 195 miles from Cordova to Kennicott. On Nov. 14, 1938, it was abondoned with the closing of the Kennicott Copper Mine, except for a 13-mile section out of Cordova which the U.S. Army used during World War II. Prior to that, in 1940, the company sold 3 steam locos and 30 flatcars to the Alaska Railroad. Further details may be found in an article by J. D. Knowles in the Upper Canada Railway Society *Newsletter* (Jan. '58).

Photo of diesel loco built by Ingalls Shipbuilding Corp. for the Gulf, Mobile & Ohio appeared in our April department. Why was it built? "In 1945, as war ended, shipbuilding declined sharply," replies Robert H. Macy, naval architect and marine engineer, P.O. Box 756, Pascagoula, Miss. 39567. "The Ingalls company picked a committee, with me as chairman, to determine what other useful products shipyards could build, using facilities already available.

"We suggested diesel locomotives. Mr. Ingalls then told me that since it was my idea, I should design and build one. First we visited 22 railroads to learn more about locomotives, particularly what features the motive power men liked best and what features the builders were not providing.

"After analyzing the data, we built a road switcher, incorporating some features that other builders have since adopted, such as high-visibility cab, use of electric-driven traction blowers, and armored electric cable in place of wires running in conduit.

"Finished in 1946, the unit was taken on a demonstration tour over various railroads and was exhibited at the Southern and Southwestern Railway Club of Atlanta. Motive power officials showed much interest, but nobody wanted to buy it unless they could be assured that Ingalls would remain in the locomotive business and have spare parts available."

However, Mr. Macy states, this turned out to be the only Ingalls locomotive every built, because Mr. Ingalls himself was a construction man, not a manufacturer.

"Construction people ordinarily build only one of a kind," our correspondent explains, "and expect to make a profit on each one, whereas in manufacturing, as a rule, a large number of units must be produced to realize a profit. Ingalls had taken a small loss on their only locomotive. If they had built 3 or more they might have shown a profit and stayed in this business.

"The post-war shipbuilding depression did not last long. Ingalls soon received orders for ships and did not see fit to continue with locomotives. The one and only diesel, builder's number 1500, was sold to GM&O and was renumbered 1900 because it regularly developed that much horsepower. It is still in service, despite the difficulty in getting spare parts, but is aging and may soon be retired."

Item 10 (May department) listed steam locos in Michigan, either operating or in display. The following addition to this list comes from Arthur F. Miller, 10411 Lakeview Dr., Whitmore Lake, Mich. 48189

Lima-built 2-8-4 No. 1233 of the Chesapeake & Ohio (Pere Marquette) is displayed outside the quarters of Detroit Model Railroad Club on the Michigan State Fair grounds. Also displayed is Grand Trunk Western 5632 (4-6-2) at Durand.

As for the Whitmore Lake Logging Museum, some track has been laid on Seven-Mile Road a half-mile east of East Shore Drive at Whitmore Lake. The museum's loco and cars are stored outside on Glacier Way in Ann Arbor.

Query from Dick Palmer, 300 Burt St., Syracuse, N.Y. 13202: "What became of Virginia & Truckee engine second No. 5 (Alco, 1925, serial number 66302), which was bought from the Nevada Copper Belt in 1947? Lucius Beebe's books don't mention either her or No. 26, but his roster says 26 was 'in service at end of operation'."

Bert Pennypacker's article on Lacka-

wanna steam power (June issue) prompted Wm. Colburn, 409 Lanier St., New Boston, Tex. 75570, to submit a list of names and numbers of DL&W engines, published long ago by Eagle Co. He asks when this was dated, also the type of each loco and when and by whom she was built. Maybe some reader can tell him. Here is the list:

(1) Orange, (2) Dover, (3) Milburn, (4) Rockaway, (5) Warren, (6) Essex, (7) Chatham, (8) Delaware, (9) Passaic, (10) Pequest, (11) Montrose, (12) Pohatcong, (13) Newark, (14) Hoboken, (15) Lehigh, (16) Stanhope, (17) Hackensack, (18) E. S. Auchincloss, (19) Pompton, (20) Phillipsburg, (21) Watsessing, (22) Boonton, (23) Stirling, (24) Madison, (25) Morris, (26) Sussex, (27) Waterloo, (28) New Jersey, (29) Senecawanna, (30) Loantaka, (31) Summit, (32) Washington, (33) Walkill, (34) Raritan, (35) Paulinskill, (36) Pequanock, (37) Roseville, (38) Ringwood, (39) Hudson (40) Musconetcong, (41) Verona, (42) Ida, (43) Eva, (44) Ella, (45) May, (46) Svagack, (47) Mansfield, (48) Franklyn, (49) Greenwich, 50 Union, (51) Jennie (52) Chester, (53) Broadway, (54) Montclair, (55) Independence (56) Dyanamus, (57) Bloomfield, (58) Economy, (59) Denville, (60) Troy, (61) Caldwell, (62) Paterson, (63) Little Falls, (64) A. Reasoner, (65) Port Oram, (66) Atlantic, (67) Waywayanda, (68) Watchung, (69) New York, (70) B. G. Clark, (71) New Providence, (72) Bergen, (73) Succasunna, (74) Grace, (75) Secaucus, (76) Sam Schoch, (77) Wiehawken, (78) Joe Scranton, (79) L. F. Tronson, (80) Berkshire, (81) Papakating, (82) Speedwell, (83) Delawanna, (84) Kingsland, (85) Sam Sloan, (86) Harrison, (87) J. J. Phelps, (88) Vulcan, (89) J. V. Onativia, (90) Chas E. Carroll, (91) W. H. Lewis, (92) William E. Dodge, (93) Percy R. Ryne, (94) Totowa, (95) Willie Sloan, (96) Morristown, (97) Pavonia, (98) Whippany, (99) William Buchanan, (100) Centennial, (101) Oxford, (102) Franklin B. Gowen, (103) Fairfield Osborn, (104) Harry W. Beebe, (105) Sam Hoyt, (106) Moses Taylor, (107) W. W. Phelps, (108) R. G. Rolston (109) Charles Danforth, (110) John Cooke, (111) Edith, (112 and 113), no name, (114) E. J. Griffith, (115) S. Griffith, and (116 to 136), no name.

Another aftermath of Pennypacker's June article: Jay Jayne of Nicholson, Pa., asks when the Lackawanna first used RPO cars and how it carried mail prior to that date.

Reply to C. G. Peterson and many other inquiries: we never supply railroad data to individuals by mail or telephone, regardless of whether or not a stamped envelope is enclosed.

Some reader familiar with Milwaukee Road electric locos is asked to tell George M. Badstuber, 21701, Euclid, Ohio 44123, what he knows about their present operation.

Fantal engine (item 9 in our April department) was one with a fantail boiler, for example, Tacoma Eastern No. 11—according to Cliff Theriault, 2036 107th Ave., Oakland, Calif. He also says that the photo on page 65 of the same issue was originally Sierra Ry. No. 30, renumbered 6 by Howard Terminal.

Says Bill Pennington, Western Pacific engineer, P.O. Box 478, Portola, Calif. 96122: "The answer to question 3 in your April issue is a bit vague to anyone who is not very familiar with both steam and diesel. You say both diesel and steam level off at about 25-30 mph. The steam engine is 'hooked up' from about 10 mph all the way until she reaches her rated speed, which speed is determined by the size of the driving wheels.

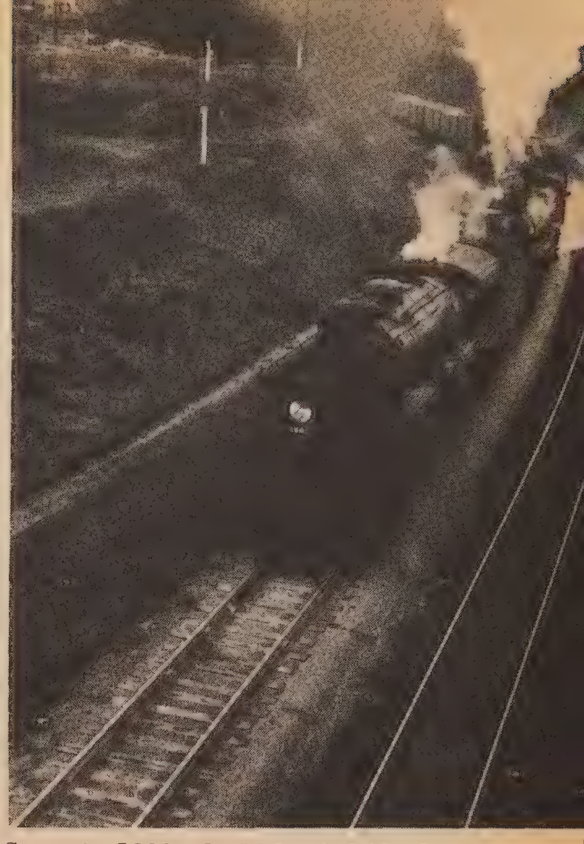
"On straight level track I found that in addition to this, a little easing of the throttle will take some friction off the valves, thus letting her run more freely and with quite a bit less pound. This 'hooking up' is to get rid of back pressure and to use the steam expansively. As a result, there is less steam to get rid of.

"The diesel is similarly 'hooked up' by changing transition or introducing a shunt in any transition which weakens the field in the traction motor, making less back power and pressure, electrically speaking, counter-EMF. The power curve of a diesel falls off much greater than it does in a steam engine. Only recently has EMD introduced a system to keep up the total usable amperage and consequently horsepower.

"The old GP-7's, for instance, had only about 200 amperes at 60 mph, while the GP-35 maintains almost 600. Their acceleration is greater and continues to be so throughout all speeds up to the maximum, which on freight gearing is 65 mph. Anything up to the GP-20 cannot do this, so it really falls behind the steam engine in this respect."

Bill Pennington also comments on April question 13: "Your answer is true in all respects except that it's purely a matter of judgment and not bad luck if a man loses his air. One of the most frequent reasons why an engineer might lose his air is in trying to 'bridge' a train when he doesn't know how. Bridging is done by making a small application and then putting the valve on the 'bridge,' a spot where the amount of air he sends back through the brake-pipe just matches the leakage so that the brakes neither apply any more nor do they kick off.

"Because a constant watch must be maintained on the air gage and the fact that most air gages do not show a critical enough amount of change in air pressure, there is danger in kicking off this application and then having to go after another. If this happens very often



Scene in 1939: doubleheaded Northern Pacific freight, with booster, climbs Jefferson St. grade out of Tacoma, Wash., bound for Portland, Oregon.
Herb Hess, KXLY, W. Boone Ave. Spokane, Wash. 99201

without a complete recharge, he will gradually use up the air in the auxiliary reservoirs."

Bill says that a better way to do this is to overcharge the head end by use of the release position of the brake valve, holding this position for 10 to 25 seconds, depending on the grade and the train's weight, length, and speed, and then returning to running position.

"The brake-pipe pressure will settle to the feed-valve setting," he explains, "and will allow about 30 head cars to stick or set up. This works only on short grades, as brake-shoes and wheels will heat up. Another way is to set up about 3 to 6 pounds on brake valve and then, before moving to release position, to turn the feed valve back slightly so it will maintain this amount of reduction.

"You can brake a normal freight train at 3 different places: at the head end, and when brake-shoes and wheels start to heat up, transfer it to the middle of the train, and later to the end. There are many other ways to brake a train."

He points out that in none of these ways do you take a chance of depleting the brake-pipe pressure. Also, depending on grade and tonnage, it would be wise to draw off enough brake-pipe pressure to stop the train before you get to the point where drawing off everything would not stop the train.

"Of course," he adds, "you always have an additional reservoir in the AB brake which will come into play if you should have to go to emergency." ●

Interesting Railfans No. 31

WARREN B. CRATER

(Portrait at the left)

JAMES A. GARFIELD, 20th President of the U.S.A., was shot by a frustrated officer-seeker on July 2, 1881, in the Pennsylvania Railroad station in Washington. For two very hot summer months he lingered on feverishly in the White House. The only air-conditioning he had consisted of huge cakes of ice laid under a slatted floor in his bedroom.

During the night of September 5th and 6th some 2,000 men toiled to lay a temporary spur track from the railroad depot at Elberon, N.J., to a beach-front cottage. Next morning the stricken President was taken by special train over the Pennsy and New York & Long Branch railroads to Elberon in the hope that salty ocean breezes would speed his recovery. But he died in that cottage 13 days later.

One of the supervisors of the emergency tracklaying job was Bartolette E. Bowne, NY&LB bridge carpenter foreman, whose great-grandson Warren B. Crater is the subject of this sketch.

Warren was born April 23, 1905, at Elizabeth, N.J., shortly after Mr. Bowne retired. Four other railroaders were in his family tree, including a grandfather who helped to restore the *John Bull* of the old Camden & Amboy (now Pennsy) in the Bordentown shops. As you know, the *John Bull* was the world's first locomotive equipped with a cowcatcher (pilot).

From as far back as he can remember, Warren was a railfan. He liked to hang around yards and stations. He watched the trains come and go. He listened with joy to the deep-throated whistles, the ringing of bells, and the clanking, bumping, and roar of steam engines at work. The exciting smells of steam, grease, coal-smoke, and even the dust from the right-of-way were perfume to his nostrils. He just *had to* become an engineer!

But first, at age thirteen, he went to work for the Jersey Central during school vacations. His early jobs included messenger, car cleaner, and machinist helper. But he preferred engine service. So he hired out to the New York Central and began firing switchers at 72nd Street yards in Manhattan, about two miles from the present office of *Railroad Magazine*. Later, as explained in his article that begins on page 13, he went back to the Central Railroad of New Jersy, this time in engine service, and has been there most of the time ever since.

In 1927, while firing out of Rockaway, N.J., he met a brunette named Margaretta Palmer, daughter of a Lackawanna car carpenter and foreman. Margaretta caught his fancy. After an ardent courtship he married her. They now have three sons—Warren, John, and Tom—and five grandsons.

"Three of our grandsons," *Intersting Railfans* No. 31 says proudly, "are showing an interest in railroads."

When the Depression set in, railroads all over the country, including the Jersey Central, began furloughing employes with the least seniority. In 1933 Warren found himself out of work. Using his railroad experience, he got a job for a while as motorman on the New York subway system, Ind. Division. In 1935 he married. In 1936 he returned to the CNJ.

"That was when I first got to know him," recalls one of Warren's friends, John P. Scharle, now living at 136 North Penn Street, Allentown, Pa. "The furloughed Jersey Central men who hired out to the subway lived near the 207th Street terminal. They and their families socialized a lot. Steam men working for a subway line was quite a novelty and they liked to talk about it with one another.

"Around that time Warren went in for O gage railroading at the New York Society of Model Engineers. We kidded him about playing with toy trains. But Warren took his hobby seriously. I remember him showing me the castings he had fabricated for a model of a Reading P-7, a single-cab Atlantic, and they impressed me so much that I joined the Society myself."

Tom Taber, the principal founder of the Railroadians of America, has known Warren for about 35 years.

Besides being a good engineer and a hard-working, honorable man, says Tom, "he is a first-class mechanic and an excellent modelbuilder. I have seen his models of CNJ and other locomotives. But by way of friendly criticism I would say that he keeps his interests rather narrow. I have not heard of him doing any civic-service work where his railroad knowledge could be used to advance the public welfare, although he has helped the Railroadians a great deal on exhibitions and other activities."

The Jersey Central engineer is fond of birds and animals. "I can make up to nearly all dogs," he says, "and I like to watch the squirrels and bluejays, robins, grackels, sparrows and other birds enjoy the lawn and foliage outside our home (270 West Colfax Avenue, Roselle Park, N.J.). Feeding attracts them and keeps them as steady customers. I never had a desire for hunting. That kind of sport, to my mind, is a waste of natural resources."

Like "Jack" Pontin, Paul Carleton, and other "Interesting Railfans" in our series, Warren Crater finds daily guidance in his religion and, in fact, starts every day with a prayer. His ability to laugh at a joke on himself proves his sense of humor. One pet project he hopes to undertake some day is running a railfan trip, but instead of taking pictures of railroad equipment he'd shoot the fans themselves, like monkeys sizing up the people who stare at them from the other side of their cage bars.

Warren can get angry, too. Especially at "the fool motorist who, with a ton and a half of Chevrolet, will contest the right-of-way with a 2,000-ton freight train." And he doesn't like to see kids in an unsafe position such as the picture in May *Railroad*, bottom of page 41. "Undoubtedly, those two babies were protected while the photo was being made," he says, "but people looking at it are not likely to put safety in its proper perspective."

Joseph J. Wilchek, New Jersey state legislative representative of the Order of Railway Conductors and Brakemen, remembers the time when he was a train rules examiner and safety supervisor for the Jersey Central. Says he: "Warren Crater's safety record to date is perfect. When he attended my safety classes he would listen intently and ask questions, and outside he'd often discuss safety methods with the other employes. He was brilliant and studious, too, at my classes in examination for train rules."

Warren regularly reads both *Railroad* and *Trains* and finds the material in both of them generally good but feels that "David P. Morgan's editorials should well be left to *Railway Age*. Even so, each magazine is doing a remarkable job. We need them both and I will continue to support both."

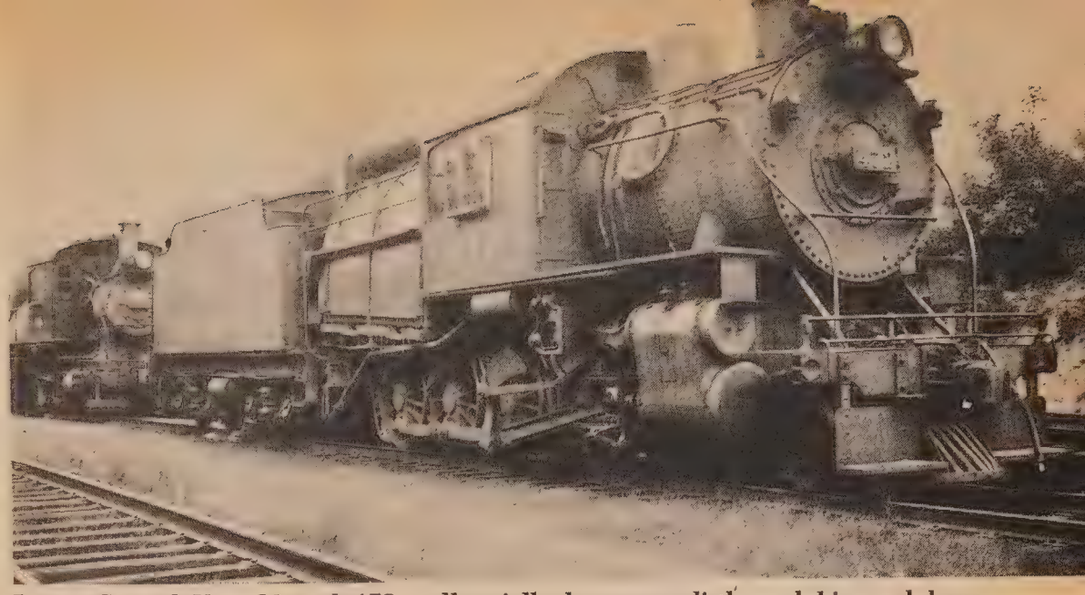
His reading matter also includes two daily papers, the Brotherhood of Locomotive Engineers' weekly, and *Holiday* and National Geographic magazines. Currently he is enjoying Morris Cafky's *Colorado Midland* (reviewed on page 54). There are nearly 5,000 negatives in his well-filed collection of engine pictures. He uses these photos to illustrate his own books and to help other writers, editors, and publishers. All of his 2,500-plus scenic photos are now on color slides.

He sold 2,180 copies of his first book, *Locomotives of the Jersey Central,* before it went out of print. The buyers include railroad men and fans in all of the fifty states except Hawaii, also some foreign countries. His more recent book, *New Jersey Central Album,* is available at $3.25 a copy from dealers and from himself. Both books are concerned with CNJ history and steam power. They are rich in pictures and mechanical details.

"Warren," says John Scharle, "is gifted with a mechanical mind and is a student of design. He is also a draftsman of sorts. He can rattle off dimensions at great length. One day in about 1941, while I was visiting Warren in the Jersey City terminal, I noticed an old Pacific with her tender height behind the collar raised a few inches, and asked him about it. Quick as a flash he had the answer. When a mechanical stoker was applied to the engine, he said some water space was lost. In order to maintain the 9000-gallon capacity they increased the size of the tender at the rear.

"On another occasion, my friend put some locomotive defect on his work sheet, and, as a result, was assigned one of the 590's instead. Warren was happy. He had always admired those racy-looking Atlantics with their Davis counterbalance, their Brooks style of trailer wheels set way back, their clipped exhausts for fast running, and their beautiful six-tone foghorn chime whistles."

Warren Crater expects to retire in 1970. "What will you do then?" he was asked. "For one thing," he said, "I'll have time to delve more deeply into railroad history. I will also do quite a bit of writing. And maybe I'll give more attention to the birds and squirrels." ●



Jersey Central Nos. 80 and 472, colloquially known as little and big coal hogs.
Photographed in 1940 by Warren B. Crater

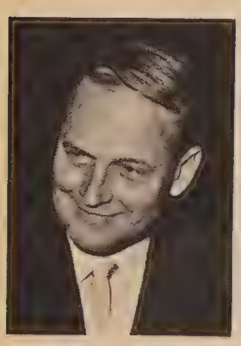
Last-minute check-up by Benjamin Michaels, CNJ hostler in the Jersey City yards.
Photo made especially for Railroad Magazine by A. F. Sozio

Car 3105 in Buenos Aires in 1960; type used elsewhere in So. America.
Stephen D. Maguire, P.O. Box 51, Belmar, N.J.

Steve Maguire's

TRANSIT TOPICS

WHILE Philadelphia police with dogs are guarding their city's subway system at night to keep down the incidence of crime on trains and stations, New York's Mayor Wagner announced that, starting April 7th, a policeman armed with a revolver and a nightstick would patrol every New York subway train between 8 p.m. and 4 a.m. Every New York subway station platform also is being guarded during the night.



Steve Maguire

"The hoodlums and toughs who prey on innocent people are going to be taught a lesson, a lesson they need," said Mayor Wagner. "Police Commissioner Mike Murphy has his orders. We have developed an emergency program to deal with the roughnecks and the wolf packs of young brutes and sadists who have terrorized and tormented subway riders."

Mr. Wagner also ordered these additional measures to protect the city's vast subway system:

(1.) During non-rush hours rear cars will be closed and the doors locked.

(2.) During night hours auxiliary station entrances and passageways will be closed.

(3.) City Housing Authority police, correction officers and sanitation police traveling to and from work or on assignment in uniform will travel free on the subways.

In all, 1,200 additional policemen are now on duty in New York nightly —800 of them in the subways working on the overtime basis until the city can recruit and train 800 extra transit police, whom the city will begin hiring at once.

The city's overtime cost alone will be $1.8 million a month for the next three months, or until the new men are hired.

NEW YORK subway freight operations are recalled by Felix Reifschneider, P.O. Box 88, Fairton, N.J., who writes:

"Old Brooklyn Rapid Transit operated freight service in South Brooklyn when those lines were on the surface, in between elevated trains. This was an outgrowth of the original Brighton, Culver, and West End lines, among others, all of which had steam railroad franchises and carried freight.

"The BRT inherited and continued this freight service, but with some restrictions. Only certain lines could haul the standard steam-railroad freight equipment which the BRT interchanged with the Long Island and Bush Terminal railroads. But to serve the other lines, the BRT had its own freight equipment and box motors and electric locos.

"No doubt freight service would be possible in the subways today, with special equipment, but it would have to be carried on at night or at least in non-rush hours. Such service to certain industries could be cheaper than the present costly trucking—also much quicker."

IOWA TERMINAL R.R. trolley freight line at Mason City, Ia., will replace the old rotary at its Emery shops with a rectifier until bought from the Chicago North Shore & Milwaukee after the latter was abandoned in 1963. This will give a power plant of 1500 kw., which is needed. Business along this line has increased greatly. Most freight trains are now hauled by two Baldwin-Westinghouse motore in multiple unit.

NO FURTHER extension of the Chicago Transit Authority's popular Skokie Swift line is possible. This hope died with the Chicago North Western's purchase of 8 miles of right-of-way from the abandoned North Shore line north of Dempster Street in Skokie, Ill., for a million dollars.

You may recall that after the success of the Skokie route became assured, plans were afoot to lengthen the line northward over the old North Shore tracks for at least 5 miles through Northfield and Northbrook.

Municipalities along the route thought they might even get a fast connection with the Chicago subway. But while they were exploring ways to finance the purchase and rehabilitation of the unused trackage, the energetic C&NW moved swiftly. The North West-

Photo from Stephen D. Maguire

Los Angeles Ry. tower car in service in Vernon, Los Angeles (January, 1934).

The people of West Germany still take kindly to mass transportation by trolley car, judging from this view of Nurenburg.
Mike White, c/o Lt. Col. L. H. White, Pers. & Admin. HQ Shape, APO 09055, New York

Rolling between the Sargent & Company factory buildings in New Haven, Conn. (in 1949) is double-truck Birney No. 3000. Along with two similar cars, this one was built for Connecticut Company's isolated line between Winsted and Torrington.
Edgar T. Mead, 1158 Fifth Ave., New York 29, N.Y.

No. 1304, typical of cars that ran on New York Rys. (Green Lines) until 1935.
Photo by Stephen D. Maguire

ern's freight line adjoins the old North Shore right-of-way to the west and this road also was planning to buy the much-coveted land. It wanted its trains to reach industries located on the east side of the NS line but no longer having rail connections.

C&NW had the million dollars that the municipalities lacked. The consummation of this deal gave the big railroad another advantage: it eliminated the possibility of Skokie Swift competition with C&NW commuter trains over that route. This news came from Wendall Smith, Leslie, Mich., and Alex Darragh, Wilmette, Illinois.

A revamped and compact new Chicago transit map is now available for free distribution. Besides the latest route changes, the reverse side lists all routes, a street directory, and schedules of early morning *Owl* runs. Copies can be had by writing Chicago Transit Authority, Public Information Dept., P.O. Box 3555, Chicago, Ill. 60654.

As part of its capital improvement program for this year, CTA has authorized bids for construction of a rapid transit inspection shop in Forest Park, costing about $1,500,000, to replace inadequate facilities now used there. The new shop will contain pits, hoists, parts storage areas, and other facilities.

PHOTO of a line of passengers descending steps of the 35th Street el in Chicago, which appeared in our April issue, could not possibly show commuters, says Charles A. Walton, Jr., P.O. Box 1038, Santa Monica, Calif., a former North Shore Line conductor. Commuters haven't used those stairs in 40 years. The crowd pictured were White Sox fans headed for the ball park.

Allen H. Berner, 871 Aberdeen Rd., Bay Shore, N.Y.
Birney cars 503 and 601 passing on a street in Arequippa, Peru, in July, 1964.

NEWEST in a long line of plans for the Los Angeles area was unveiled recently by the Southern California Rapid Transit District. This proposal would see a 160-mile transit system covering approximately the same area which the vast Pacific Electric system once served.

The first line to be built, says SCRTD, would be 23 miles long, extending east and west from El Monte to West Los Angeles. Later on, at least six other routes would be projected. Financing, it is hoped, would be aided through increased motor vehicle taxes and a limited property levy.

Just how popular such taxes would be in a community that now relies almost solely on gasoline vehicles is problematical. At least, once again, plans are being made for a rail system that would not add to the smog-creating fumes of the present gasoline and diesel vehicles. These fumes, by the way, menace health and may cause lung cancer.

ONLY one *Libertyliner* of the two former North Shore line *Electroliners* bought by the Philadelphia Suburban Transportation Co. in 1963 for service on its Norristown line will run this summer.

The electro-pneumatic braking system on one of these articulated trains will be repaired during the slack summer while many commuters are away on vacation. The other train is making rush-hour runs all summer. In the fall, both will resume rush-hour trips. Weekend runs, made at the start of *Libertyliner* service, were dropped last year, due to lack of patronage.

A 16-STORY office building over that portion of 69th Street terminal which is owned by Philadelphia Suburban Transportation Co. in Upper Darby, Pa., is planned by Merritt H. Taylor, Jr., the company's president, and a building contractor, John B. McClatchy.

The new $4 million structure will be the largest in the area and will be the area's first new office building in a quarter-century, reports Art Munson, Levittown, Pa., adjoining at the west the existing large, old, subway-el terminal building owned by Philadelphia Transportation Co., with which it will connect through a concourse. There will be parking space for 350 autos directly above the present 69th Street trolley and bus loops, which will be roofed over. No changes in loading patterns for trolleys or buses are contemplated.

LAST electric operation of the Sacramento Northern in Yuba City-

Marysville area will soon end, laments Kenneth V. Shattuck, 1600 70th Ave., Oakland, Calif. 94621. Electric freight operations were continued on this part of the line due to a city franchise prohibiting diesel locomotives in the streets. Bay Area Electric Railroad Assn. sponsored a final run April 10th with a motor pulling cabooses for the passengers. Only two electric motors were left at the end, Nos. 653 and 654.

Mr. Shattock, who belongs to the Association, says they are building a museum at Rio Vista Jct., Calif., at the site of a former Sacramento Northern station. Already one mile of track has been laid.

SAN FRANCISCO cable cars stopped running March 21st for repairs that took several weeks, reports Ralph Kerchum, 4350 Bridgeview Dr., Oakland, Calif. Temporary bus service operated during the interval. In the $277,000 repair job, the cable-winding machinery in the Washington-Mason power house was renovated for the first time since originally installed in 1877.

A NEW trolley line is being built at Bloomsburg, Pa. Contractors are laying track that will eventually extend 2 miles through the former farm of Harry L. Magee, chairman of a Bloomsburg carpet company. This land is now part of the Magee Transportation Museum, which displays old horse-drawn vehicles, automobiles, and railroad cars, the latter including steel magnate Charles Schwab's private car *Loretto*.

Sixty pound rail is being laid. Some of it came from the abandoned Johnstown, Pa., trolley line. A car barn houses the trolley equipment now being sent to the museum for eventual operation. The first car obtained was the body of North Branch Transit No. 10 that ran between Bloomsburg and Berwick until 1926. After that it was used as part of a house and was kept in fine condition for 35 years. Mr. Magee bought it for his new line. We'll have more news on this next month.

Foreign Electric Lines

MELBOURNE & Metropolitan Tramways Board, which operates a large surface transit system in Victoria, Australia, will buy 100 new streetcars in Europe, reports Ken McCarthy, 155 Parkside Dr., Dapto, New South Wales, Australia. This equipment will embody the latest engineering principles. First cars of the new fleet will probably be in service in 1967. The Board contemplates subway operation for these cars at a later date.

The state government of New South Wales announces a $200,000 plan for extending Sydney's suburban electric rail system to various beaches and other areas where trams were abandoned a few years ago. Some express highways also are contemplated. One would run to northern beaches near Warringah, with an electric rail line installed in the center strip, as has been done successfully in Chicago, Illinois.

AN ADDITIONAL 34 PCC cars from Washington, D.C., have been sold to the transit system in Barcelona, Spain. These include some standee-window newer cars. Apparently some Spaniards are not used to the fast acceleration and deceleration of PCC's. A news clipping from Bill Myers, 1511 N. 2nd St., Harrisburg, Pa., reports a form of carsickness experienced by some Barcelona riders, so much so that company officials are seeking a modification to solve the problem.

(Continued on page 41)

READY IN FIVE MINUTES

by Ralph A. Snyder

BILL STEVENS, boomer train dispatcher, pounded a mean key in answer to the smart-alec lightning slinger at Cross Fork. That fellow, who was also a roving railroader, was two pains in the neck, according to Bill Stevens—especially between the dead hours of morning from one to four.

The eastbound Extra 135 had been at Cross Fork for fifty minutes, but the operator still refused to go into the yards to learn the cause of delay.

Bill rapped his key: "Go see what's holding Extra 135. I've got 147 stuck west at Burrows."

"Nice dispatching," taunted CF, "but I'm no trackwalker."

"You'll have a chance to walk in the morning," Bill flung across the valleys and mountain.

"I've walked," clicked the wire, "from better pikes than this."

The dispatcher closed his key hand and sat back to swear. His hand moved to the phone. He'd call the chief, but the poor devil had been up a day and a night clearing the east end of a derailment. It wasn't fair.

Bill's brows wrinkled. His gaze strayed to the droning relay on the far end of his desk—the commercial wire. Once he started to plug in there, but dropped the idea. Five minutes went by. He called Cross Fork again:

"What about that Extra 135?"

"The conductor came back," chattered CF. "He says the engineer's packing a hotbox on the tender. They'll be ready in five minutes."

Bill repressed a desire to call the operator a liar, for every nerve of him warned him something was in the air. But Superintendent Allen's injunction the day before had been pertinent.

"You're in charge at night, Stevens," the official had said. "Report the sleepy operators and trainmen who won't play ball. I'll call them. It's that or—" he'd left the rest unsaid. But Bill knew.

The dispatcher watched the slowly-moving minute hand of the clock. Five minutes—ten. He called Cross Fork again.

CF snapped back, "Brakeman returned and said they'd be ready in five minutes."

"Five—what's he doing?"

"The hogger's got a side-rod down."

Then Bill Stevens blew up. He didn't notice the silence of the commercial wire, nor the office cat, nor the clock. He grabbed the phone and called the shop. A sleepy voice answered.

"What the devil," Bill demanded, "ails engine 135? She's up at Cross Fork with a side-rod down and I've got a man tied up at Burrows."

" 'Tain't the 135," denied the shopman! "She's a good Mike. It's that fool crew. Northam, ain't it?"

"Yes, sure—why?"

The shopman laughed. "That's a boomer bunch—a train and engine crew the boss hired to help out in this coal rush. Call the super. He hired them."

Bill started to do as he was told, but decided to wait. Perhaps, after all, the crew was in trouble. But he couldn't move the 147 up to Cross Fork for a meet, as the yard there was plugged—full of cars. Only in case of emergency. Other trains were coming up the far side of the hill to set out cars of coal in Cross Fork yard.

Bill called the operator again. "Extra 135—any report?"

"Brakeman went back," said the operator crisply. "Flagman just came by, though. He said the hogger was packing the throttle."

"The—" The train wire went open. Bill's words sent the cat flying. Then: "Go out there and see what in hell's wrong. You hear! I can't run trains unless I know what's going on!"

"Nuts!" clicked the insolent op.

Bill grabbed for the phone again. This time he called the chief. Into that sleepy man's ear he poured the whole story.

"It's a boomer outfit," the chief explained calmly, for chief dispatchers rarely get excited. "I'll call them and the operator in the morning."

"But the road's tied up. I've got a man ready to leave Galeton, here, in thirty minutes, too."

"Get the 135's conductor," instructed the chief. "Take away his orders. Deadhead the crew in on something. Call another crew to go after the train."

"Yes, he'll fire them," Bill muttered. "I see him firing anyone with men as scarce as brains in an engineer. Hm-m! Well, I'll get away from this bunch of boomers, so help me!"

He fished a letter out of his pocket and reread it. The letter had come from the superintendent of the Denver & Rio Grande. They were desperately in need of dispatchers at Denver. Bill was to wire the official stating where to put out passes for him to go to Denver.

The dispatcher pulled the plug from his train wire and cut in on the commercial, as a familiar hand signed off.

"Sounds like that ape at Cross Fork," he thought. "Now what's he doing on the Western Union wire?"

Bill began calling PG, the relay office, and got a quick reply.

For a few seconds he played with the wire while formulating his message; then he began sending. The Rio Grande was to put passes out at Pittsburg. Bill Stevens agreed to come at once.

PG was slightly slow in sending his okay, but finally did. Bill heaved a sigh of relief. He vowed solemnly, "I'll go where this bunch of apes won't find me," and began calling Cross Fork.

The fresh operator would hardly have had time to walk out in the east end of the yards. But Bill called. He was surprised at the brisk response.

"Ready in five minutes," said CF.

"He's what?"

"The flagman says they'll be ready in five minutes. All they got to do is set out a lunged car"—meaning, of course, a car with a drawbar pulled out.

Bill swore openly. Then: "What's been the delay?"

"That was it—pulled a lung."

"Listen!" Bill sent the electric dots and dashes flashing from his key. "Go get that conductor. I'm going to annul his orders. Tie him up there."

There came a pause. Then: "Northam says he don't want to."

"Northam," the dispatcher spelled out savagely, "has tied the road up; now I'm tying him."

"Okay. I'll tell him."

BILL called Burrows and instructed him to get Extra 147 west ready to move as soon as he could change the orders. Galeton yard cut in for running orders for another extra west, engine 165. Bill fixed them as far as Burrows.

Then he called CF and put out a 31 order changing the meet between Extra 135 east and Extra 147 west from Burrows to Cross Fork. As soon as Northam signed it he would complete the order to Burrows.

The clock moved faster as Bill waited. Several times he called Cross Fork, but got no reply. With a sour grin of resignation he placed his feet on the desk corner. A half-hour passed into eternity.

Again he called Cross Fork. This time CF replied instantly.

"Did you get Northam?" Bill asked.

"I told him, but he said never mind the order; he was—" The wire opened. Bill stormed.

Ten minutes went by. Bill poked the coal fire in his stove, faintly aware that the commercial relay was buzzing something. He came back and cut in just in time to hear the Cross Fork operator sign for a message. That was about the last straw—holding the train wire open while he transacted commercial business! At that moment the train wire went closed. Bill grabbed at it.

"Why in hell did you hold this wire open?" he challenged.

"22." The signal that the Cross Fork op was busy on other wires.

The dispatcher raved. No rules permitted an operator to leave the train wire upon any excuse whatever when he was working there. Bill's fingers cracked the key with the curt mesage, "Sig?" (signature to the order).

The wire went open a full moment and CF slowly clicked back, "Extra 135 east departed 3:47 A.M."

When Bill Stevens recovered, he called Burrows and killed the order there. Only the knowledge that he would be away with the arrival of the day man kept him from going mad. Not another night would he work on this road.

He started to note the delay of Extra 135 on the sheet, but paused thoughtfully. After all, he didn't know what had caused the delay up there. He'd wait until the boomer crew came in.

Bill dropped the pen. But he was to know the wherefore of the delay at Cross Fork long before the train came in. And the information would change him from a boomer to a home guard.

He stroked the office cat. "Kitty," he said happily. "I'm going west again, in the morning. Never another night will I work with that lousy bunch of boomers. I'm going to Denver, Kitty."

The creature purred understandingly. An hour later Burrows reported the train coming down the mountain. Then he reported both trains away.

DAY was flushing the eastern horizon when Bill became aware that PG was calling him on the commercial wire. He cut in.

It was a deadhead message from Denver. It told William Stevens that the Rio Grande was placing a pass for him at Pittsburg and requested that he wire when he would leave. They urgently needed dispatchers. Bill okayed the message and reread it with a thrill of happiness. He was free at last—free of the boomers!

"Say," it was PG talking on the wire. "Reckon I can get a sine in Denver? Seems everyone's going."

A *sine*, of course, meant a relay operator's job, so called because many roads furnished the new man with a personal sine—letters to use in receipting for messages.

Bill toyed suspiciously with the key, his brow wrinkling. So "everyone" was going? *He* wasn't everyone. However, in true boomer fashion he told the operator they needed men at Denver. Sure, he could get on. As an afterthought he asked: "What you mean, *everyone's* going?"

The PG man made a couple of wire laughs. Then: "I've handled messages from that lightning slinger at Cross Fork tonight. He's going, and Conductor Northam and his crew and engine crew's going, too. Didn't you know?"

Bill Stevens pulled the plug with a lurid string of profanity. So that was the cause of delay! The crazy boomer crew had deliberately stayed there while they got a message through to Denver for another job.

"Ready in five minutes—huh?" He laughed, and then made another vow.

"I'm *not* going to Denver," he told Kitty. "Not ever." And again the office cat purred contentedly.

MAIL CAR

(Continued from page 10)

stop at Randolph, N.Y., the station used by the Amish people when traveling between their Conewango Valley settlement and points in Ohio. Amish religious beliefs forbid them to own automobiles, so they ride the trains to places too far for horse-drawn vehicles to reach without undue strain.

An E-L spokesman offered to stop other trains at Randolph if notified in advance and if the Amish would withdraw their objections to having trains 7 and 8 taken off. It was disclosed at the hearing in Jamestown, N.Y., that those two trains averaged only three passengers a day! ●

RETRAINING workers over 40 is a tough problem for the French National Railways. These problems have arisen as a result of the changeover from steam to electric and diesel-electric traction, and in connection with the resettlement in the French railways of staff who had worked on Algerian railways before independence. ●

OUR story of the 14-mile run on the Empire State Railway on the Middleton & New Jersey line (April issue) reminds Floyd J. Mattice, 1011 Madison St., Rochester, Ind. 46975, of another New York State shortline, the Middleburgh & Schoharie. The M&H connected with the Delaware & Hudson at Schoharie Jct., but no longer exists.

"While I have been a lawyer for 60 years," he writes, "I was born and raised on a railroad and worked for various roads in my youth. My father E. H. Mattice, was a conductor on the M&S, the old Chicago & Atlantic (now Erie-Lackawanna), and the Lake Erie & Western (now Norfolk & Western). I held such jobs as callboy, telegraph operator, station agent, roadmaster's clerk, etc.

"The M&S was built in about 1870 by seven men: three Boucks, three Vromans, and one Rowley (my grandfather). Besides being an M&S conductor, my father was also stationmaster at each of the line's three stations. When the train, consisting of the engine and one open-vestibuled wooden coach, pulled into one of those depots, Dad would get off, open the building, and sell tickets. Fare was 5½ cents a mile. The engine was very small and had only one driving wheel on each side. Last time I saw her was in 1894, year of the Pullman Strike, while I was visiting Middleburgh." ●

CIRCUS TRAIN. Charlie Campbell's letter on the John H. Sparks Famous Shows (March issue) evoked this anecdote from D. N. Tremblay, 752 Joliette, Longueuil, Que., Canada:

"That same circus was touring Quebec Province and was billed to perform in La Tuque, a lumberjack and fur-trading center. We were called late in the evening to handle the circus train over the Canadian National's single-track line from that town to Roberval, to Chivoutimi, and to Riv & Pierre Jct., a total of 385 miles. About 4 a.m. we received orders giving us rights to proceed to Chambord Jct., 51 miles away. From there we were given our second running orders, which read: 'Engines 1156 and 1075 run extras Chambord Jct. to Lake Edward, non-stop.'

"Everything went fine till we got to the foot of Simon Belly grade. Then we noticed black smoke up ahead. Knowing that we had no meeting and that the clearance card showed no train ahead, we kept on till we reached the summit. There we stopped, because we were sure that a train was coming toward us. Luckily, the engine crew of that other train, extra 1154, spotted us in time to stop about three feet from our pilot! It was a close call; neither train had a scheduled meet. The circus people never knew how close they had come to death." ●

HORSESHOE CURVES may be found on many railroads. This information comes in answer to a question by W. R. Osborne, 1019 S.E. 12th St., Deerfield Beach, Fla., that was published in *Railroad Magazine*. The list includes: CB&Q, between Belmont and Crawford, Neb.; Reading, Mt. Carmel Jct., Pa.; B&O, 8 miles south of Bradford, Pa., and at Mance, Pa.; Pennsy, freight cutoff known as Muleshoe Curve in Pennsylvania mountains, and SP, near Indian Camp, Calif., and at Wolf Creek, Ore.

Also one on the D&RGW west of Denver on the Dotsero line and two near Gilluly, Utah. The Western Pacific has two: one near Keddie and one on a new line in the Feather River area, partly in a tunnel.

"Canadian National has one in use near La Tuque, Que.," writes D. N. Tremblay. "There used to be one between Wayagamack and La Tuque on the La Tuque branch, which was closed Feb. 29, 1919. I was the fireman on that last train."

For this information, our thanks to Roy F. Wake, George Zwicker, W. J. Murray, K. L. Lantz, E. L. Lantz, E. L. Thompson, E. P. Alexander.

For many years Mr. Osborne was a civil engineer, first on the Lehigh Valley, then on the B&O, and later in non-railroad work. As a hobby he photographed locomotives and trains from about 1930 to 1958. He has contributed railroad articles and hundreds of photos to magazines, including ours, to newspapers, and to the Sagle-Staufer book *B&O Power*.

"I have acquired," he says, "what is perhaps the most complete photo roster of B&O steam power to be found anywhere. This includes pictures of more than 392 different B&O classes and sub-classes, plus technical data." ●

TRANSIT TOPICS

(Continued from page 39)

SINCE 1963, when 10 new trolleys were bought from Japanese builders for the lines in Seoul and Pusan, Korea, no additional new cars have been acquired. The Korea Electric Co., which owns both systems, hopes to sell out to the government and doesn't want to buy any more new equipment. Eight of the new cars run in Seoul, 2 in Pusan, the only South Korean cities that still operate trolleys.

THE WORLD'S newest subway—in Milan, Italy's second largest city—is expected eventually to carry 60 million riders a year.

New Electric Publications

Electric Cars in the Electric City, by Robert D. Mowers, 52 illustrated pages 8½x11″, staple bound, tells the story of Schenectady, N.Y., where the large General Electric plant is located. This book contains action views of trolleys and interurbans, with a brief history of the company. Two pages cover the Fonda, J. & G. interurban, whose cars once came into Schenectady. Copies are $2.50 each from James D. Johnson, P.O. Box 52, Wheaton, Ill.

Inside Underground Railways, as written by Alan A. Jackson, 64 pages, with sketches and diagrams, 5x7″, hard binding, is a technical book designed to explain the engineering details of the London subway system. It covers subway construction, equipment, signaling, track, power supply, and operation. Price is $2 from Leisure Time Books, P.O. Box 634, New Rochelle, N.Y.

76 Years of Peoria Streetcars, by Paul Stringham, 84 illustrated pages, 8 x 11″, soft cover binding, gives us more, in history and photos, than we'd expect from a small city traction system. The text coverage is complete, plus a profuse collection of very old photos, also rosters and maps. Price is $5 from Electric Railway Historical Society, Box 3305, Merchandise Mart Station, Chicago, Ill. 60654.

LIGHT-WEIGHT CARS, 20 pages, staple-bound, is a reproduction of J. G. Brill Catalogue 266, issued in 1923, giving data on 8 cars built by the company, mostly Birneys. Price is $1.50 by the ERHS (see above).

HISTORIC TROLLEY GUIDE TO SUBURBAN ELECTRIC LINES OF THE NEW YORK METROPOLITAN AREA, 16 pages, staple-bound, is a reproduction of a 1914 trolley guide to areas within a radius of about 50 miles from New York City. It contains maps of all trolley routes within that radius, also running time, fares, and mileages of most of those lines. It covers from Peekskill, N.Y., on the north to Sea Girt, N.J., on the south, and Lake Hopatcong, N.J., on the west and Babylon, L.I., on the east. Price $1 from the ERHS (above). ●

Riders of the Iron Trail

by CHARLES LAYNG

SAID the one-armed crossing watchman of Sommerton: "Old as he is, Dave Morrows is the best damned hogger on this division."

Overhearing that remark, Dave shied hastily away from the group he had approached unobserved. So a decrepit gate-tender considered him old, eh? The engineer was nearly seventy but didn't feel a day over fifty. Most normal people his age don't. They usually think of themselves as young in spirit and even, to some extent, in personal appearance also.

Jane Morrows, who was ten years his junior but still beautiful, had always been wise enough to cherish this illusion in her tall, powerful husband. As

Dave continued walking toward the roundhouse, with head erect, she stood at the gate of their front yard on the hillside that late summer afternoon, watching him go down the hill.

Presently she heard a small rumble, far down the valley. Then it increased. The lordly *Moonbeam,* fastest of all L&S trains except the occasional silk specials, was coming into town at seventy miles an hour, and soon burst into view with a pennant of smoke streaming behind. It dove through the yards in a single swoop, holding the main line and kicking spitefully at the switches that might have thought to swerve its course.

A shower of sparks fanned from the wheels as the brakes snarled and bit, and Number 1 slid to a palpitating halt at the station. Its pause was only momentary, for no one save the engine crew every got off the *Moonbeam* at Sommerton.

The engine was uncoupled and another backed on to the train. A new crew clambered into the cab. With a few preliminary tugs the locomotive settled into harness, whistles shrilled impatiently, and Number 1 was away, off on another journey!

Jane followed its passage with eyes and ears until the limited was swallowed by the encroaching hills. There was pride in her gaze, for her Dave held the throttle of the *Moonbeam.*

SOMMERTON was a railroad town. The din of the valley assailed Jane's ears. Beyond the roundhouse loomed the sooty bulk of the erecting shop, where steam locomotives were being submitted to major operations, and the L&S yards choked with cars.

Great hammerings and bangings reached her ears, and the hissing of tortured flames in blacksmiths' furnaces. A rhythmic clangor indicated the drop-hammer in action. Switchers whined as they shuttled car into car with much bustling racket. Their air

pumps, exhausts and whistles squealed, bellowed, and piped unceasingly. Above all there rose, now and again, the piercing, peremptory ringing of bells.

Stacks reared their ugly heads from the shops, from the locomotives and from the shanties which housed the yard offices. Each stack belched forth its quota of acrid smoke, light or dark, to add to the gloomy pall that shrouded Sommerton and poisoned its air.

It was before the days of effective fuel conservation, and the huge clouds of smoke left grimy touches everywhere. Soot sifted through the cracks into the unpainted wooden houses. Frequent dustings availed not against it.

Until dusk Jane continued to stare at the place where her man and the train he piloted had vanished. Then a sharp voice came to her out of the murk.

"Number 1 was a bit late tonight.'

Jane recognized the vague shape on the sidewalk as Mrs. Carl Lepps.

"Yes," she said, "but Dave will make up time before he gets to Hightower."

There was a certain condescension in her voice, for Carl Lepps was only a freight engineer and could hardly rank with the driver of the *Moonbeam.*

Like everything else in Sommerton, society was governed by the all-enveloping railroad. The wives of passenger engineers were in the front rank—unless one chose to include the wives of the local officials, who were, more or less, a race apart, spending as little time in Sommerton as they could.

The shop people, with their swarms of children, really didn't count for much. With a few exceptions, they were pariahs to the hill society, although Jane was quite friendly with Mrs. Louis Cartney, the roundhouse foreman's wife. But then, Mr. Cartney was practically in the Operating Department. Besides, Jane felt she should take the lead in showing tolerance, even to the shop people.

She rejoiced that Hildy was away at school, far from the railroad atmosphere she disliked. She tried to forget railroading, but this was impossible. Through the open window, railroading charged in, with its whistlings and its hammerings.

Jane shuddered. She felt that she could have held Dave for herself if it hadn't been for the fascination of the iron trail. It was almost worse, she felt, than if he were running around with other women.

When Hildreth was born, Jane determined that that railroad should never take him, too. Almost from infancy, she had tried to instill a hate of it. Then, when he came of age to be affected by the call of the rails, as were all Sommerton youths, she steeled her heart and sent him away to a school in the East.

AS DAVE nursed Number 1 along, he thought again of the crossing watchman who had said he was the best engineer on the division. Well, he considered, if he wasn't he should be, for there was iron in his blood. He came of a family of railroaders as old as the L&S. The combination of L&S and the Morrows was unbeatable.

Charles Layng, as he looked in 1932, when he wrote *Riders of the Iron Trail.* After working in the Operating and Traffic departments of the Southern Railway and the Midland Valley Railroad, he was for years associate editor of *Railway Age.* Lives in Florida.

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Since fast trains had made their first trip—which meant practically ever since the L&S was built—there had always been a Morrows in the cab of the *Moonbeam* out of Sommerton.

Dave's grandfather had come to town when it was only a construction camp and in time he'd become a full-fledged puller of throttles. He ran the first *Moonbeam* into Sommerton, and continued on the train until old age forced him to give way to his son.

Dave's father had been firing the *Moonbeam* for years, and was transferred to the right side upon the retirement of the first Morrow.

In due course, Dave himself took up the shovel and fired the *Moonbeam,* with his father at the throttle. Since seniority rules were becoming somewhat more rigid by this time, Dave was compelled to endure a period of exile driving freights and local passenger trains. But when his father died quietly in bed, after years and years of running the *Moonbeam,* Dave had acquired sufficient seniority to bid in the job and take his father's place.

Three Morrows generations on the *Moonbeam,* and now, happily, the fourth generation was nearly ready to carry on. Hildy should really have started his railroad career a few years ago, except that Jane had silly notions about education.

A brief station stop at Holt interrupted Dave's musing, but they were soon away. The hoghead had long since made up the time—it had only been a few minutes anyway—and they were drifting along easily again.

As he thought of his son, he saw no reason why the Morrows dynasty should not continue on the *Moonbeam* forever.

The general manager—yes, even the president—knew Dave and his family history. Dave was sure that Hildreth would come along fast, once he started firing. He himself figured on another ten years; his father before him had been eighty-four before he finally had to let go of the throttle. By that time Hildreth would be an old hand—maybe even on the right side of the cab—and probably with a son of his own coming along to take over after him.

Other engineers wanted their sons to be trainmasters or superintendents, but not Dave. He felt that driving the *Moonbeam* was sufficent honor for the Morrows; it was their destiny.

AS THEY approached Hightower, the end of his run, Dave yawned and stretched luxuriously. He was never so truly at peace as after he had put down his seat pad on the right side of the cab. The pad was cracked in spots and the stuffing stuck out in more than one place, but it was almost as old in service as Dave himself, and he would sit on no other.

Dave's layover periods at home were short, hardly ever more than twenty-four hours. He was comparatively happy there. Even so, before he went out again on his run, his eyes began to hunger for the signal lights and his fingers to itch for the throttle and the reverse lever.

Family life soon became tepid, after the roaring surge of the road. A little sleep, an hour or two with his wife and son, and the rest of the time eating up the miles on the *Moonbeam*—this was

all that Dave Morrows asked of life.

He loved his wife and son, but he loved the railroad still more, and the center of his affections was the *Moonbeam*. To have it late infuriated him and inspired him to almost incredible deeds. Some of his firemen had descended white-faced from the cab at the end of certain runs, to tell of mad rides in the wildly swaying cab when Dave was making up time. Still, he was a careful engineer. The safety of passengers was a fetish with him.

The L&S wound its way through mountains on a track full of grades and curves. It was not built for such speed as Dave called out of his locomotives when the *Moonbeam* was late, but the oldtimer never thought of an accident. He calculated his chances carefully, and had confidence in his own ability, besides an uncanny feel for bad track which had more than once stood him in good stead.

No Morrows had ever been in a serious smashup. Dave had seen plenty of them, but not since taking over the *Moonbeam*. In his freight running days, cars in his trains had often been derailed, for car inspection was not then at its present standard, nor car construction either. Frequently a car rocked itself off the rails, or developed a sharp flange on one wheel that sooner or later split a switch.

Once, crossing the high trestle at Winford, the third car back of his engine had pitched over. By the time Dave could stop, eight more cars had followed. In the drop of about two hundred feet, their couplings came loose, and the cars scattered, burying themselves in the churned muck of the creek bed at the bottom. They never did find all the cars.

DAVE often wondered if he hadn't made a mistake in picking a wife who was not of a railroad family, even though he was fond of Jane. He had married in middle age when Jane was still young and pert, and it's doubtful if he would have mated at all except to continue the Morrows family on the *Moonbeam*.

A railroad woman, he thought, wouldn't have made such a fuss about comings and goings on his runs as Jane did. Why, he had even seen her crying when he was only going to be away a few days! Her attitude was puzzling. It never occurred to him that, in her jealousy, Mrs. Morrows hated the iron trail.

But the hoghead was glad he didn't have a woman like Mrs. Edward Cochran. Ed was never troubled with embarrassing greetings or farewells from his wife. She hardly waited until Ed had started on his run before receiving that nasty dude, the third-trick dispatcher, and no doubt going to bed with him. Everybody in town knew about it—that is, everybody except Ed.

One day Dave asked Carl Lepps, "Does your woman act up every time you go out on a run?"

"She oughtn't to," Carl said. "It's her bread an' butter. She used to carry on, when we was first married, but no more."

"Jane and I have been married a long time now, but she still raises a big fuss. It bothers me."

Lepps considered a moment. "My Ada tells me that Jane says she ain't gonna let Hildreth be a railroader."

"Don't believe it!" Dave snapped. "He'll follow right along with the rest of us Morrows. Jane knows that as well as I do. Why the hell wouldn't she want Hildy to be a rail?"

"Ada doesn't like the railroad."

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Dave scowled. Then he considered that Carl was a freight engineer and likely to make some such dumb reply. But if the women were talking that way he'd have to put a stop to it.

He waited until after supper that night. Then he said: "Jane, it's time Hildreth was coming back here to take a job firing."

"Oh, but Dave," Jane replied in a panic, "he's doing so well at school; we couldn't take him away now."

Hitherto, in his rather aimless efforts to have Hildy start on a career the hoghead hadn't noticed what effect this had on Jane. This time he watched closely and there was no mistaking the troubled look in her brown eyes.

"Is it true that you don't like the railroad?"

"Dave, Hildreth should be a lawyer. I don't want him to go railroading."

The husband ripped out an oath, something he seldom did at home. Jane cried hysterically. Dave stood if for a while, then clumped out into the kitchen. The sounds of her "spell," as he termed it, followed him there, so he left the house.

Without conscious effort, he found himself down by the roundhouse, and he entered. One of the 1800 class engines that pulled the *Moonbeam* was standing over a pit. He clambered up to a seat in the cab and stared unseeingly into the man-made, murky dusk, where workmen, with flaming torches, swarmed with gnome-like activity.

There he sat for hours, saying nothing to reply to occasional remarks addressed to him. He was thinking deeply.

At last he climbed back up the hill. The house was silent. Jane was sitting as he had left her but she was sobbing no longer.

"Jane," he said, "This foolishness must stop. Hildreth will *not* be a lawyer. He's going into engine service, like his father and his grandfather, and his great-grandfather, before that."

"Yes, Dave," Jane said dully.

AFTER the quarrel, Dave gave even less attention to his home. Jane had persuaded him to let Hildreth finish the school term; but after that, Dave insisted, the boy must come back to Sommerton and get started on the railroad.

The hoghead was now spending practically all his layover time at the roundhouse, except when he was not eating or sleeping. He loved locomotives, for a big coalburner seemed to have a human entity, and he passed happy hours with Lou Cartney, the roundhouse foreman, watching them being put in racing trim.

The L&S the engines were chain-ganged. Dave would have liked an assigned engine, especially if—as was the practice on the some other roads—it had his name painted on the side of the cab. But chain-ganging had its merits, too, from Dave's viewpoint, since it enabled him to drive all of the 1800 class engines at one time or another. He liked that very much.

Dave respected the big freight-haulers but reserved his love for the sleek 1800's. His favorite was the 1819. Most engineers considered the 1819 a cranky nuisance, but Dave understood her moods, and how to handle her.

And what feats he performed with the 1819 when the *Moonbeam* was late! Then the qualities for which he loved the engine came to the surface. Dave would have sworn that the temperamental old girl knew to the minute how much time to make up, and how fast she had to run to make that time.

After Knowlton Hill had been put behind them, Dave would shove the throttle over and the 1819 would become a fleet greyhound. The slow chugging upgrade was transformed into a stream of exhausts from the stack.

Crossing whistles came in shrieks that echoed and reverberated among the hills in a wild triumphant song. Dave's heart pounded exultantly. These periods were his life, his love and religion.

On the other hand, Hildreth Morrows despised Sommerton—although born and raised there—and under his mother's careful training, he had also grown to resent railroading. He had returned to Sommerton at his father's command, but in a rebellious mood.

Dave had no desire to precipitate a row by rushing things, but he held rigidly to the decision that Hildy must be a railroader—anything else was unthinkable.

The lad was a tall and broad-shouldered, just turning twenty. His biceps might be rather soft but a few months of swinging the scoop in the cab would fix all that. You can't shovel several tons of coal a day and remain soft.

Dave made a mental note to speak to Tom Russell, the superintendent, about a job for the boy, as soon as he could get in to see that busy official or meet him on the road. Tom could certainly fix it all right for a Morrows; yes, and give him a shove along after he had the job, too.

LOU CARTNEY was in a terrible state one day when Dave arrived at the roundhouse. A shopmen's strike had left the road short of available power—so short, indeed, that he hadn't a single locomotive available for the *Moonbeam*.

'Dave." he said, "you'll have to take the engine that's bringin' in Number 1 and run her through to Hightower. I ain't got a thing left in the house."

This was long before extended engine runs became the commonplace that they are now.

"What in hell have you been doing with all the engines around here?" Dave asked wrathfully. "Dumping them into the cinder pits? You had a dozen or so last night."

Lou had an alibi ready.

"Yeah, hoghead, but that was last night. A helluva lot of things has happened since then. For one thing, up comes half a dozen trains of perishables from the South. Can they wait a few hours in the yard? They can't, not by a damn sight. So the Traffic Department gives me an order: put passenger engines on the fruit blocks!"

Lou's opinion of the Traffic Department need not be printed. Any railroader can supply the words and music.

"All right, alibi, all right," Dave grumbled. "I expect I'll have to limp into Hightower on one side, with an engine that some damn fool has torn the insides out of. What engine's on Number 1, anyhow?"

"The 1819, your old favorite."

"Why didn't you tell me that before? Who's running her?"

"Bill Evans."

"Ow!" Dave wailed. "I might have known. Why, damn it, Lou, he's no hoghead. Why the hell they ever made a driver outa him is beyond me. He must have a drag at headquarters."

"Well, that's that, and what are you gonna do about it?"

"Get her from that louse Evans half an hour late, I expect, and then have to run the wheels out from under her to get Number 1 to Hightower on something like schedule. I'll tell you, Lou, this railroad's going to hell."

DAVE and his fireman, Ralph Kinnear, walked grumpily down the tracks, to the station. Ralph sat on a bench outside, thinking of unpleasant jobs of ashpan cleaning and rebuilding a fire that the other fireman had probably let go to pieces.

Dave went upstairs with Pat McCall, the fussy old conductor, who was as much a fixture on the *Moonbeam* as was Dave. Both gave vent to loud moans when they were told that Number 1 would be twenty minutes late into Sommerton.

"You lightning slingers better give me a break north of here," Dave warned. "I'll have the 1819, and I'll show you some running that'll make your eyes pop, if Evans ain't whipped the heart outa her."

Dave returned to the platform and fussed until the *Moonbeam* finally pulled in, a full thirty minutes late, instead of twenty as at first reported.

Evans made a characteristically rough stop that set the dishes in the dinner to dancing.

As he climbed down, Dave snorted. "What the hell do you think you're doing—switching gons?"

"Look here, Dave," the other engineer protested, "you know the 1819's the worst piece of junk on this pike. I thought she'd die on me down by Green Mill. She oughta be on the scrap heap."

"Yeah?" Dave said shortly. "And a lotta hogheads I know oughta be on the scrap heap, and one of 'em's named Evans."

He yelled at Ralph, "Get up there quick and see about that fire!"

Under his breath Ralph made a nasty crack about Morrows being old enough to go on the scrap heap, too, but fortunately nobody heard him.

Dave looked back along the train and noted there were fourteen cars, an unwieldy number for such a job of running. Hell, there was enough weight to bog down a freight hog, let alone the high-strung 1819!

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Gloomily he stopped to consider the situation, but only for an instant. Then, with oilcan poised, he made a hurried circuit of the engine, dabbing here and squirting there.

His conductor, watch in hand, was giving the highball, but Dave paid no heed. Precious as every second was, he had to make sure that all was well with the 1819. A minute now might easily save ten minutes to a half-hour on the road. At the speed he intended to run, nothing could be left to chance.

Climbing into the cab, he asked the fireman casually, "How's the fire?"

"Rotten!" said Ralph. "That tallowpot Stephens couldn't even build a bonfire."

"Well, you get it in shape before we hit Knowlton Hill, or it'll be just too bad."

Dave looked out the window. Conductor McCall was giving a frantic highball. No doubt he was cursing volubly as well.

Dave responded with a derisive hoot of his whistle and shoved the throttle forward. The *Moonbeam* moved out

of Sommerton on a history-making run.

Up in the dispatcher's office, keys sputtered and spat. Earl Marsh, on the second trick, was trying to get slower trains out of the way of Number 1, with that running fool, Dave Morrows, at the throttle.

Operators at country stations in the hills took train orders and decided to listen in on this run. It would be worth while to hear what Morrows could do, with thirty minutes late and a tight schedule. The clicking record of his run would help to while away the small hours of morning.

THE MOONBEAM clattered out of the station, with the 1819 complaining in surly fashion. The engine apparently was not in her best mood. She almost seemed to be telling of mistreatment at Evans's hands.

The fire, Dave discovered, despite Ralph's best efforts, was still terrible. It was ragged and uneven, and totally unfitted for the 1819. Under Dave's supervision, the youth sweated and shoveled and toiled.

"If this old girl dies on me on Knowlton Hill," the throttle artist roared, "there'll be a fireboy missing on the L&S."

Ralph did not reply. There was much to do, and breath was too valuable to waste on a crabbed old man. He carried out Dave's advice, though, mumbling that he had sense enough to do that anyway.

Soon the fire began to approximate what Dave thought it should be. His temper, and with it the temper of the 1819, improved accordingly.

The lights on the signal masts winked and blinked, but continued to show a satisfying string of green. Dave was humming a little when, as the train approached the R&M crossing, the distant signal showed yellow for caution.

Then he swore, but really lost his temper when the home signal of the interlocking plant came into view, with a blinking red eye blazing from its top. Dave seized the cord and whistled peremptorily for a clear board.

That light had no business showing a stop indication when the 1819 and the *Moonbeam,* not to mention Dave Morrows, wanted to get by. But the light remained stubbornly red, and Dave brought the *Moonbeam* to an impatient and unwilling halt.

He peered into the gloom ahead. "I'm a simple son of a—"

A long freight train was rumbling over the crossing—a freight, of all things, delaying the *Moonbeam!* Worse still, it was an R&M freight. Grudgingly Dave whistled out his flagman, realizing now that this would be no momentary halt.

"Why did the interlocking tower give this drag a clear board?" Dave wanted to know.

There'd be hell to pay when it was reported, as it certainly would be, if he had anything to say about it. It just went to show what a rotten railroad the R&M really was, particularly as compared with the L&S.

As a matter of fact, that freight train was one of its hottest of hot shots, with livestock for the morning market, and the R&M dispatcher, a hundred miles away, was, at the moment, sweating over it.

Dave didn't know this, and it wouldn't have made any difference if he had. To him a passenger train—especially the *Moonbeam*—was the only thing that counted. Such trains should be kept free from interruption. He had been running passenger for a such a long time now that he'd forgotten the days, when, as a freight engineer, wearily trying to get a drag over the railroad, he had cursed passenger engineers as selfish hogs.

He fretted over the delay until at length the lights of the caboose flicked over the crossing and Dave put a heavy hand on the whistle. The 1819 was soon screaming loudly for the flagman to come in, and make it snappy.

THE FIVE miles to Knowlton Hill were covered at high speed. Presently they were on the first sweeping curve that marked the beginning of the climb. The engine swayed alarmingly in rounding the curve. Ralph seemed to stick to the deck by a miracle only, as he ceaselessly fed coal into the maw of the firebox.

"Nice work, kid," Dave approved. "You're holding the needle right where I want it."

Ralph glared spitefully, but said nothing, for the 1819 had a heavy train, and the grade was not one to be sneezed at. They swung around another curve. The engine leaned over perilously until it seemed that she could never right herself, then she resumed a momentary balance with a back-snapping jerk.

Dave yowled a string of unintelligible words, while Ralph swore fervently, for he had been tossed against the firebox, and it was hot.

Both expressed an exceedingly low opinion of the ancestry of a roadmaster who knew so little about putting the proper amount of superelevation into curves. And, while they were about it, they included all roadmasters in their condemnation, not to mention supervisors, assistant engineers, and section foremen.

Ralph now leaned far out on his side. "Clear board," he chanted above the roar. Knowlton station flashed by. This was good. A stop at Knowlton for a "31" order would have meant a hellish time starting the train on that grade.

Two miles more of this climb and they'd be over the summit, ready for some real running. The 1819 labored nobly under Dave's hand. The needle on the pressure gage was far from satisfactory when they reached the top, and the big engine was gasping a bit, but the fireboy remedied that. The worst of the run now seemed to be safely behind.

It was just a mile from the south end of the Smith Mine passing track to the station at Sylvan, and Dave timed it in fifty-four seconds.

Two miles past Sylvan they entered the "racetrack," ten miles of straight track, on a slightly down grade. Here the 1819 showed her stuff. There may have been faster ten miles run on railroads than those that Dave put behind him on the racetrack that night, but certainly never on the L&S.

Back in the dispatchers' den at Sommerton, Earl Marsh's eyes widened with astonishment as the passing reports on Number 1 came clicking in from the country stations.

"Take a look at these OS reports, Sam," he called to the chief. "Dave is highballing tonight!"

The chief glanced at the trainsheet and scratched his head. "Some speed," he said, "and damned if he ain't got that cranky old 1819. Hope he stays on the rails."

A FLEETING streak of light was all that the night operator at Havens saw of the *Moonbeam,* though the roar of its passage shook the flimsy depot to its foundation. He flashed a passing report to Earl, who considered it almost incredulously, for Dave was really traveling now.

"We ought to be by Callville at 11.23," Dave screamed into his fireman's ear.

Ralph nodded, shaking his head to get the perspiration out of his eyes. This speed called for a lot of coal and sweat. They were approaching Dwight. Dave glanced at the train order board at the top of the station building, and shouted:

"Pick up a 19 order at Dwight!"

Ralph hung up his scoop and scram-

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bled over to the right side of the cab. He hooked his arm through the handhold, and leaned far out.

"Hey," he yelled at Dave, "slow down a little, can't you?"

The operator stood on the platform, holding aloft the train-order hoop. With the ease of long practice, Ralph speared it on his free arm, disentangled the wad of colored tissue paper, and tossed the empty hoop back on the far end of the platform. The *Moonbeam* had barely slackened speed, and at once picked up again.

Ralph took the order to Dave, and together they read: "No. 16, s-i-x-t-e-e-n, take siding for No. 1, o-n-e, at Callville."

Dave glanced at his watch. "Eddie must be on time tonight for a change," he said.

As distance was eaten up, and the *Moonbeam* began to be somewhere nearly on time. Dave lost some of his tense, worried look. For the first time he leaned comfortably back in his seat.

The passing track at Callville was at the left going north, and Ralph, peering ahead into the darkness, saw the headlight of train 16 alongside the main line. Whether he glanced at the switch light dwarf signal to see if it were red or green, he never could remember afterward.

"Highball!" he shouted to Dave.

A moment later 1819 hit the switch. There was a screech of wheel on rail, a sickening lurch, and the huge locomotive plunged wildly into the passing track. Someone, somehow, had probably failed to throw the switch!

Three figures hurled themselves violently from the deck of 16's engine, but Dave and Ralph had no such chance. They were with the 1819 when she buried herself into the other locomotive with a grinding roar.

Dave's hands were still clutching the throttle when they dug him out of the mass of shattered steel.

(Continued next month)

Charles E. Miller, 312 Stuart Pl., Green Acres, Harrisburg, Pa.
Oct. '59: eastbound Reading excursion emerges from tunnel, Mahanoy City, Pa.

Coming Events

June 12: Lv. Hoboken on the Erie-Lackawanna 8:30 a.m. Montclair 9:00, Dover, Phillipsburg; Lehigh Valley to Allentown, Wilkes-Barre, Pittston Jct.; then E-L again; $12.50 (kids $7); E-L diner. Send check to Railroad Enthusiasts, Box 532, Englewood, N.J.

June 13: Steam-diesel trip, Lv. Pittsburgh via B&O thru scenic Western Pennsylvania, 111 miles, to Somerset, Pa. Ride Laurel Mountain RR. behind former BC&G No. 13, a 2-8-0; 15-mile round trip (B&O's Boswell branch), snack-baggage car; optional hot dinner at Somerset. Write NRHS Box 282, Monroeville, Pa. 15146.

June 18-19-20: "Railroad Days" in Dunsmuir and steam on McCloud River RR. Write Northern Calif. Ry. Club, Paul von Haften, 112 Arguello, San Francisco, Calif.

June 20: D&RGW special train from Pueblo thru Royal Gorge to Salida and return. Write Model Railroaders, R.M. Wexler, M.D., 310 Colorado Ave., Pueblo, Colo. 81005

June 24-July 4: section-obs. car "Cornhusker Club" from Neb. to New York via CB&Q and E-L, lv. Lincoln 9:30 p.m., Omaha 10:30. Return lv. New York on July 3 at 10:10 a.m. Fare $155-up. Write Cornhusker, 2566 Farnam St., Omaha, Neb.

June 26 till Columbus Day: Steamtown trains, with steam, on daily schedule; lv. Bellows Falls for Chester depot, Vt.; 40 steam locos, including UP "Big Boy", on display. Write Steamtown U.S.A., Box 71, Bellows Falls, Vt.

June 26: Pasadena to Del Mar (San Diego County Fair grounds) via special Santa Fe train; lv. Pasadena 10:30. Snack car, open-platform obs. car. Fare $7.50 (kids $4). Write Orange Empire Trolley Museum, Box 548, Perris, Calif. 92370.

July 2-3-4-5: Steam on SP&S branch between Veronia and Banks, Ore.; lv. Cascade, Ore. for Portland. Boat ride thru locks to Bonneville Dam. Write Hal Rogers, Central Coast Ry. Club, Box 1714, San Jose, Calif. 95109

July 3: Steam-powered "Georgia Peach Special" with ex-S&A No. 750, trip of 250 miles; lv. Atlanta 8 a.m. for Fort Valley in Peach Belt. Box lunches and cold drinks on train. Fare $7.50 (kids $6). Write Thomas C. Phillips, Box 13132, Atlanta 24, Ga.

July 11: First railfan trip ever on the Bangor & Aroostook; lv. North Maine Jct. (near Bangor) 9:30 a.m., 4 gondolas, 3 cabooses, rare BL-2 class diesel, 30 miles along scenic Penobscot Bay to Searsport, seafood dinner available. Write Downeast RR. Club (Railroad Enthusiasts Div.), Box 196, Brunswick, Me. 04011.

July 11: Trolley trip, Boston (Mass) MBTA lines, 6 hours, photo stops; $5; reservations by July 5. Write NRHS, Gerhard Salomon, 530 Cleveland St., Allentown, Pa. 18103.

July 25: on Belfast & Moosehead Lake, 66-mile round trip along scenic Passagassawakeag River and Winnecook Lake. Open gondolas, 2 cabooses, GE 600-hp. loco; lv. Belfast 10 a.m. to Frankham Jct. Chicken barbecue lunch at Unity Pond on return. Downeast RR. Club. Box 196, Brunswick, Me.

July 25 and Aug. 29: Ontario Northern Ry. offers old-fashioned excursion, Cochrane to Moosonee and Moose Factory, 186 miles up on James Bay. Lv. Cochrane 8:30 a.m. on "Polar Bear Express." See northern wilderness. Train has entertainers and a restaurant car. Fare: $10 (kids $5). Write Ontario Northern Ry., 805 Bay St., Toronto, Ont. Canada.

Aug. 1-21: NMRA tour to Japan; lv. San Francisco via Japan Air Lines. Contact Paul Shimada, 3509 Northgate Blvd., Sacramento, Calif. 95834.

Aug. 20-Sept. 3: Special train to NMRA Convention lv. Pittsburgh, Pa., and Columbus, O., on Aug. 20; Fort Wayne, Ind., and Chicago, 21st; behind Burlington steam engine. Go to Banff, Jasper, Vancouver for Aug. 26-29th Convention; SP Shasta Route, optional side trips. Write Dan Ferrus, Private RR. Cars, Inc., 424 Ludwig Rd., Fort Wayne, Ind.

Aug. 22: San Francisco Muni. trolley system, all lines. Write Central Coast Ry. Club, Box 1714, San Jose, Calif. 95109

Aug. 29-Sept. 11: Special "International Limited," steam partway, from Chicago to NRHS Convention via Canada, including Pacific Great Eastern Ry., Vancouver and Portland, returning via SP&S to Wishram, GN to Bieber, WP's famed Feather River Canyon to Salt Lake City, U.P. to Sherman Hill and Denver; CB&Q to Chicago. Write Allan Vaughn, 704 E. Charles St., Oelwein, Iowa.

Aug. 30-Sept. 20: European Tour, NMRA, to visit rr. museums, model rr. meetings, ride trains, see France, Germany, Switzerland, Austria, Italy, Portugal, via Swiss Air Lines. $795 from New York, $100 deposit now. Write Walthers Tours, 1245 N. Water St., Milwaukee, Wis.

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Bangor & Aroostook Railroad

Refrigeration facilities of Bangor & Aroostook at Northern Maine Jct., Maine.

James J. Andrews, in top hat, boarded the stolen *General* at Big Shanty, Ga., heading for Chattanooga, Tenn. But he never got there. Chased by Confederates, the Union saboteurs dropped railroad ties on the track in a vain effort to block their pursuers. Fuel ran out; they abandoned the engine. Eight of them, including Andrews were hanged. The General is now displayed at New York World's Fair, near main bus entrance.

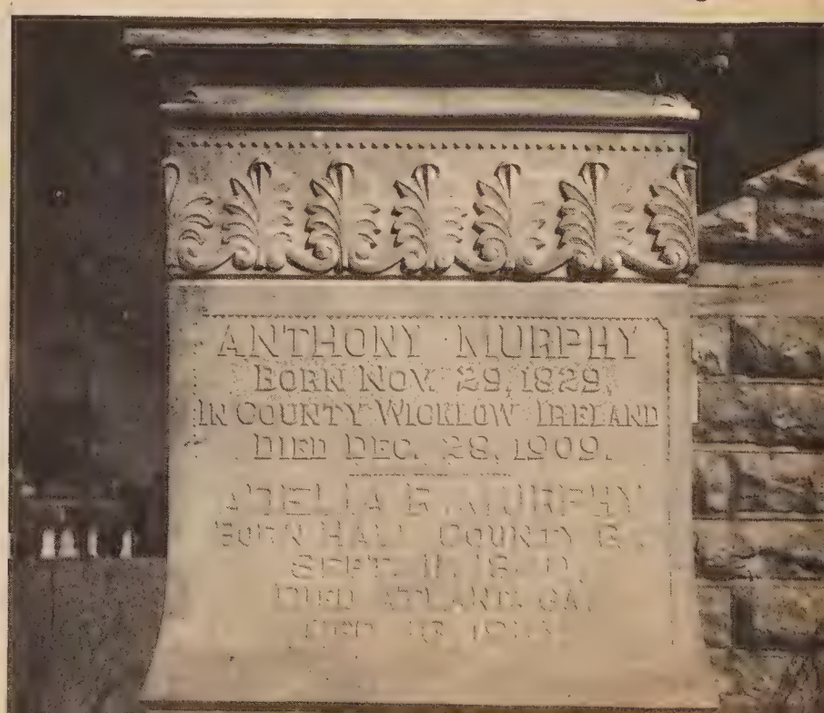
Two of the 125 illustrations in Freeman Hubbard's book *Railroad Avenue*

THE ANDREWS RAID ON APRIL 12, 1862

Grave of Capt. Wm. A. Fuller (1836-1905). He led the Confederate party which overtook the *General* after a long and exciting chase.

Both photos by Col. James G. Bogle, 1749 Dyson Dr., N.E., Atlanta, Ga. 30307

Stone of Anthony Murphy (1829-1909), who helped to recapture the *General*. Both graves are in Oakland Cemetery in Atlanta, near the site of where the raiders were hanged.



Shortlines of Minnesota

Locomotive roster compiled by Sy Reich

Road Numbers	HP	Builder	Builder's Model	Wheel Arrngt.	Tractive Effort	Weight	Date	Notes
Duluth, Winnipeg & Pacific Railway								
3600-3614	1800	Alco Pr.	RS-11	B-B	56,697	240,000	1956	
Duluth & Northeastern Railroad								
31-33	600	GM-EMD	SW1	B-B	48,620	193,610	1940-1	1
34	1000	GM-EMD	NW2	B-B	60,850	243,390	1941	2
Duluth Union Depot & Transfer								
5	400	GE	44-ton	B-B	21,625	86,500	1943	3
Green Bay & Western Railroad								
101	660	Alco	HH 660	B-B	?	?	1938	4
102	660	Alco-GE	S1	B-B	59,700	205,000	1949	
301-304	1500	Alco-GE	RS-2	B-B	62,000	247,300	1950	
305-306	1600	Alco-GE	RS-3	B-B	61,950	247,800	1951	
307-308	1600	Alco-GE	RS-3	B-B	61,575	246,300	1955	
310	2400	Alco Pr.	RS-27	B-B	64,025	256,300	1960	
311-313	2400	Alco Pr.	DL-640A	B-B	64,250	259,500	1963-5	
506-507	1500	Alco-GE	FA-1	B-B	58,500	232,500	1947, 9	5
Minneapolis, Anoka & Cuyuna Range Railroad								
100	350	GE	—	B-B	28,500	114,000	1913	6
7438	?	Mack	—	B	?	?	?	7
Minneapolis Eastern Railway								
Owns no equipment. Uses CMSP&P and C&NW motive power.								
Minneapolis, Northfield & Southern Railway								
1	660	Baldwin	VO 660	B-B	?	?	1942	11
10	1200	FM	H12-44	B-B	74,700	249,000	1951	8
11	1000	FM	ALT 100.6a	B-B	71,580	238,600	1946	9
12	1000	Baldwin	VO 1000	B-B	72,760	242,530	1944	10
15	1500	BW	DRS 6-6-1500	C-C	98,940	329,800	1950	
20-24	2000	BW	DT 6-6-2000	C-C	106,800	356,000	1948	
25	2400	BLHW	RT-624	C-C	?	?	1953	12
30-33	1200	GM-EMD	SW1200	B-B	60,800	246,340	1962, 4	
60	660	Baldwin	VO 660	B-B	59,779	199,265	1940	13
Minnesota, Dakota & Western Railway								
11-14	470	GE	80-ton	B-B	40,000	160,000	1949-52	
Minnesota Transfer Railway								
60-62	660	Alco-GE	S1	B-B	59,000	198,000	1941	16
63-64	660	Alco-GE	S1	B-B	59,400	198,000	1946	
90-92	900	Alco	HH 900	B-B	?	?	1939	14
93-94	1000	Alco-GE	S2	B-B	69,000	230,000	1946	
100-105	1000	Alco-GE	S4	B-B	71,940	239,800	1951	
200	1600	Alco-GE	RS-3	B-B	64,680	267,620	1951	
202	1500	Alco-GE	RS-2	B-B	62,205	243,140	1949	15
Railway Transfer Co. of the City of Minneapolis								
Owns two units, the specifications of which are unknown to us.								
St. Paul Union Depot								
441	380	GE	44-ton	B-B	22,000	88,000	1941	

Rosters based on data from Canadian National public relations dept., D&NE gen. mgr., DUD&T supt., United Electric Coal Co., GB&W supt. mechanical dept., MA&CR agent, ME agent, MN&S vice pres. and gen. mgr., MD&W gen. supt., and MT vice pres. and gen. mgr. It is accurate as of the first quarter, 1965. None of the Minnesota Shortlines locomotives has a class number except those of the DW&P, Class MR-18a.

(1) D&NE 31-33 ex Elgin, Joliet & Eastern 245, 234, 241.
(2) D&NE 34 ex EJ&E 405.
(3) DUD&T 5 ex Northern Pacific 99.
(4) GB&W 101 sold to United Electric Coal Co., renumbered 1.
(5) GB&W 506 ex Kewaunee Green Bay & Western 503 (1st). Nos. 506, 507 scrapped.
(6) MA&CR 100 originally was Minneapolis, St. Paul, Rochester & Dubuque 100, an electric locomotive. Sold to Central Warehouse Co., not renumbered. Then sold to MA&CR, not renumbered. MA&CR subsequently renumbered it 1 in 1943, then 100 in 1946. Converted to diesel-electric in 1957.
(7) MA&CR 7438 purchased from Fegals Construction Co. (8) MN&S 10 is ex Minnesota Western 10.
(9) MN&S 11 is ex MW51.
(10) MN&S 12 is ex EJ&E 482.
(11) MN&S 1 sold to Cargoe Carriers, renumbered 61.
(12) MN&S 25 no longer on roster.
(13) MN&S 60 is ex MN&S 600.
(14) MT 90-92 no longer on roster.
(15) MT 202 was originally Soo Line 370.
(16) MT 60-62 sold to Relco in 1964.

ONTARIO NORTHLAND RAILWAY

Locomotive roster compiled by Sy Reich

Road Numbers	HP	Builder	Builder's Model	Wheel Arrangement	Tractive Effort	Weight	Date
1200-1202	1000	Alco-GE	S2	B-B	?	?	1946
1203	1000	MCGE	S4	B-B	?	?	1950
1300-1301	1500	Alco-GE	RS-2	B-B	?	?	1949
1302-1303	1500	MCGE	RS-2	B-B	?	?	1950
1304-1311	1600	MCGE	RS-3	B-B	?	?	1951
1400-1401	1600	MLW	RS-10	B-B	?	?	1955
1402-1403	1600	MLW	RS-10s	B-B	?	?	1957
1500-1521	1500	GMD	FP7A	B-B	?	?	1951-3
1600-1605	1750	GMD	GP9	B-B	?	?	1956-7

Roster based on data in X2200, submitted by Peter Cox, accurate as of the first quarter, 1965.

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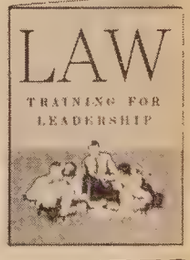

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BOOKS OF THE RAILS

COLORADO MIDLAND, by Morris Cafky, 467 pages, 8½x11″, copiously illustrated, 4 full-page pictures in color, pocket containing 5 large folded maps, locomotive and equipment rosters, bibliography, and index, Rocky Mountain Railroad Club, Box 2391, Denver 1, Colorado, $14.

Colorado Midland is so large, so heavily bound (with inlaid gilt lettering), and is printed on such thick coated paper that it weighs an ounce under five pounds! Cafky has done a thorough job of research, writing, and selecting a wealth of illustrations. The editors, typesetters, proofreaders, engravers, layout men, bookbinders, typists, etc., have done equally well in their own fields. The result is massive, monumental, and very impressive. *Colorado Midland* follows closely the format of three previous books published by the Rocky Mountain Railroad Club. The new book's many attraction include some full-page paintings by Howard Fogg.

The Midland, as it was often called, had less than 350 miles of track, including branches and spurs, at the time it was abandoned in 1923; but it was one of the "glamor" roads, a road saturated with lore, a road much frequented by boomers. Much more important, it formed a link in a transcontinental rail system.

So interesting was the CM that *Railroad Magazine* has published several feature articles about it, not to mention a novelette. Cafky went into considerably more detail than our own writers dreamed of. He has, once for all time, told the whole fascinating story of the Colorado Midland.

A very long chapter entitled "Personal Reminisces" gives the book an exciting and adventurous quality that most railroad histories lack. This chapter tells of wrecks and runaways, boiler explosions, turntable troubles, narrow escapes, freak tragedies, rockslides, sabotage, fast runs, snowfighting with rotaries, wildflower excursions, train robberies and so on. All in all, it's a book to read, re-read, and save for future reference. We are proud to have it in our library.

Photo from collection of E. W. Hartzog

Colorado Midland had many wrecks, including this one at east end of Tunnel 2.

SOUTHERN RAILWAY SYSTEM: *Steam Locomotives and Boats*, 204 pages, 8½x11″, profusely illustrated with photos, maps, etc., published by the author, Richard E. Prince, P.O. Box 724, Green River, Wyo., $10.

Although the author of this and two previous books, *Louisville & Nashville Steam Locomotives* (now out of print) and *Steam Locomotives and History: Georgia Railroad and West Point Route*, is now living in Wyoming and working for the Union Pacific, he is still fascinated by steam lore of the South, hence his latest—and best—volume. This one has 21 pages appealing to steamboat buffs, including some fine pictures and rosters of Piedmont Air Line Route steamboats and Southern Railway Steam tugs and transfer boats. Very few books, like this one, combine rails with marine interest. (Another is Gerald M. Best's *Ship and Narrow Gauge Rails*, which we reviewed in Nov. '64).

Richard Prince is a widely known photographer. His own pictures are well represented in the new book, together with those of T.O. Acree, John B. Allen, Frank E. Ardrey, Jr., "Jerry" Best, Wiley M. Bryan, H. Reid, Thomas T. Taber, Harold K. Vollrath, and others, as well as some builders' photos.

Also included are detailed histories of the many roads which make up the Southern system and histories of the various types of Southern Power. There are 26 large pages of steam loco rosters. No steam hobbyist should miss the book. It is handsomely and sturdily bound in green, with gilt inlaid lettering.

A LONG LOOK AT STEAM, picture picture book, 98 pages, 8½x11″, heavy binding, published by the author, Robert P. Olmsted, Box 385, Maywood, Ill., $8.

Steam buffs treasure this kind of album. No text matter except short captions and a brief foreword. There is, however, a marvelous lot of miscellaneous steam-power photographs, all made by the author himself and nearly all of them action shots, printed on high-quality paper. Our favorite shot shows Mississippian engine 76 pushing a string of boxcars across a grass-bordered country road. But there is too little human interest in Olmsted's book. Practically none at all. We do not understand why so many photographers seem unaware of the part that men play in locomotive operation.

MAIN LINE ALBUM, by P. B. Whitehouse, 129 pages, 7½x9½″, thick coated paper, clothbound, Ian Allan, London, England, distributed by Leisure

Time Books, P.O. Box 634, New Rochelle, N.Y., $8.

The author presents a high-quality collection of steam locomotive and train camera studies, mostly action shots, made in Great Britain and Ireland during the past third of a century, together with informative text matter: "A Generation in Railway Photography," by M. W. Earley, and "Locomotive Recollections 1930-'60," by Norman Harvey.

***abc* BRITISH RAILWAYS LOCOMOTIVES *and Other Motive Power*, rosters, with many illustrations, 320 pages, 4x6", stiff binding, Ian Allan, London, England, distributed by Leisure Time Books, P.O. Box 634, New Rochelle, N.Y. $3.75**

Designed for the thousands of British "loco spotters," this comprehensive pocket-size volume lists all of the British Railways motive power, gives specifications for each type, and tells in which "shed" each unit may be found, with a section for "Preserved Locomotives in Working Order," and photos galore.

STORY OF THE SUSQUEHANNA & New York, 24 pages, 6x9", paperbound, illustrated with photos, map, etc., published by the author, Edward L. Kaseman, 819 Park Ave., Williamsport, Pa., $1 (Penna. buyers add 5¢ tax).

Well-written story of a steam-powered shortline now abandoned, printed on slick paper, superb illustrations.

NEVADA NORTHERN: *Sagebrush Short Line*, by Gary G. Allen, 48 pages, 5½x 8", paperbound, illustrated with photos and two-color map, edited by Spencer Crump, Trans-Anglo Books, Dept. 72, Main P.O. Box 2252, Los Angeles 53, Calif. 90053, $1.25.

This is the picturesque story of a railroad that ran through desert country between Cobre and Kimberly with short branches to McGill and Ruth. Relatively few of us are familiar with those four little communties, but they played a colorful role in railroad history. Allen's chronicle and his choice of pictures makes *Nevada Northern* a good buy at $1.25. A rather long steam roster is thrown in for good luck.

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We always review new railbooks. As an added service to readers, we sell books at about 5 percent off publisher's price. Our discount applies to almost any English-language railbook still in print, if it retails above $2.50. Each price includes shipping charges.

These books are available only by mail. Money order or check may be sent to *Railroad Magazine Book Service* (not book publisher), 205 E. 42nd Street, New York, N. Y. 10017. Here are a number of suggestions:

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MAIN LINE, ALBUM, by Whitehouse	$ 8.00	($ 7.60)
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THE TOFF AND THE SPIDER

One of *Railroad Magazine's* editors attended a trackside demonstration of Servo Hotbox Detector, heat-sensitive scanner, on Pennsy main line, Morrisville, Pa.
Photo by Arthur T. Knowles

HOBBY CLUB

Conducted by Sy Reich

COLOR-SHOT on our cover this month shows CNJ train 723, with engine 753, leaving Jersey City en route to Dunellen. It was made by Robert R. Malinoski, member of the Railroad Enthusiasts, 246 Madison Ave., New Milford, N.J. Bob was born Jan. 3, 1924, in Ashland, Pa. Stories of railroading told by an uncle who was a conductor on the Reading got the lad interested in this subject.

Sy Reich

"He used to take me out to see trains running through Shamokin," Bob recalls, "such as the Pennsy's *Anthracite Express,* powered by an E-6; ponderous ore drags, each wheeled by four or five 2-10-0's; the Reading's Camelbacks and Mallets, etc. One day in October, 1936, I bought a copy of *Railroad Magazine* which carried a passenger-train speed survey. It really started me on serious railfanning.

"After Air Force service in World War II, I went to work for the Erie in yard train service. I am now a yard conductor on the Erie-Lackawanna. My hobby interests include employes' timetables, published freight-train schedules, railroad company magazines, and such magazines as *Railroad Magazine, Trains, Railway Age* and *Modern Railroads.*

"My current fad is collecting teletyped train consists of hotshot freights, especially those containing reefers loaded with bananas and meat. I'd appreciate receiving such items from readers. Over the years I have taken a very large number of steam pictures, both black and white and color. Now and then I shoot diesel-powered trains but only in scenic locations. My favorite spots are the Maybrook, N.Y., area, up the Hudson River along the New York Central, and on the PRR near Enola."

The Steam Parade

Will the Pennsy be a "feeder line" for the steam-powered Arcade & Attica? Yes, reports Bill Kessel, our Upstate New York representative. The Keystone Road has agreed to stop its Buffalo-Harrisburg trains at Arcade, N.Y., on signal. Dick Cartright, the energetic A&A president, knows that many railfans and other prospective passengers do not have autos but welcome the opportunity to ride behind steam. He told the Pennsy that such a stop would be good for both roads. Now and then excursion groups, including school children, visit the A&A; riding the Pennsy is the best way to get there. The little pike is well patronized, Bill assures us. Even its diesel-hauled freight business is improving. But what really draws like a magnet is the A&A steam train.

The steam-powered Camino, Cable & Northern, which *Railroad Magazine* featured in April, has acquired the last Shay that ran on the West Side Lumber railroad and is now said to be operating her in regular service. Also running on

its narrow-gage trackage near Placerville, Calif., is a 2-6-0 (Porter, 1911) that previously saw service on a banana line in Guatemala.

One of the many readers who expressed appreciation of Bill Warden's article on the Cass Scenic Railroad (May issue) is Kermit McKeever, chief of West Virginia's Department of Natural Resources, Charleston, W. Va. 25301. Having let contracts for construction work and rehabilitation of the remainder of the road, he predicts, "We will be able to have a full ride to the mountain top in 1966."

Another appreciator is John W. Rine, 703 Lynn Ave., Weston, W. Va. After taking a party of eight to visit the Cass line, John was so enthused that he wrote a little book about it for children. This book has just been published. Entitled *The Little Old Train That Talks With Boys and Girls,* it has 20 pages and is illustrated with photos, including a beautiful color-shot on the front cover. If you want to buy a copy for junior, write to John. He forgot to tell us the price.

The police of Flint, Mich., received an unusual stolen-vehicle complaint the other day—a diesel locomotive missing. Officers found it about five miles from the Chesapeake & Ohio roundhouse from which it had been stolen. They were still looking for the culprits.

The Union Railroad *News* project to compile a pictorial history of UP steam locos is chugging right along. Response so far has been good. The *News* editor writes: "There must be hundreds of pictures hidden away in attics and cellars that would be tremendous additions to this collection. If you discover any in your home, please send them in. If you do not want to give the pictures up, attach a note asking that they be returned. We'll have a copy of the picture made and will return the original to you. Address URR *News,* P.O. Box, Pittsburgh, Pa. 15230."

The California Western, running between Willets and Fort Bragg, has just reopened for the season. They have located a 2-8-2, 1926 steam locomotive at Medford, Ore., that wasn't too difficult to find—but to get coaches that could negotiate the short-radius curves of this picturesque line took some looking about. They went all the way across the country to the Erie-Lackawanna and have acquired four 72-feet, 84-passenger cars of about the same vintage as the locomotive. The engine was given a thorough overhaul. This little pike is best known for its *"Skunks",* little cars with self-contained engines that jolt and sway like a Toonerville trolley over the 40 miles of twisted track be-

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William E. Warden, Jr., 1216 Shamrock Lane, Waynesboro, Va.

Remember the days when the Norfolk & Western was the last great stronghold of steam in U.S.? Here is 2-8-8-2 No. 2160 pushing a coal drag at Blue Ridge, Va.

SP cab-ahead engine 4220, emerging from tunnel into Santa Susana Pass, Calif., is about to pass under telltale. H. L. Kelso, our contributing editor, who took this photo, wonders when and where the first railroad telltale was used.

tween the two towns. The road also is used to bring lumber from the Union Lumber Company's mill at Willits down to Fort Bragg, where it is loaded for points south.

"Years ago, *Railroad Magazine* used one of my paintings on its front cover," writes James D. Mohan, 1507 Lexington Ave., Greensboro, N.C. "My interest in railroads and especially steam power is as strong today as it ever was. I have completed a series of locomotive paintings of many types from 4-4-0's to 2-8-8-4's. Those paintings were the means of starting my art career in this area, to which I moved from Boston, Mass. They now number 25 and are being exhibited in a group in various museums, galleries, and institutions throughout the state."

The exhibits were arranged by Mrs. Frances Scott, Attic Art Gallery, 402 E. Lake Dr., Greensboro, N.C., who reports that the originals of 24 of Mohan's 25 paintings are for sale. A list of the subjects, etc., will be sent on receipt of a self-addressed stamped envelope.

The steam-powered common-carrier Reader Railroad, P.O. Box 6049, Shreveport, La. 71106, has just issued a new set of six beautifully colored postcard views of the road's steam train. All but one are unique in that the photos were shot from a helicopter. The effect is enchanting. These postcards cost 5¢ apiece or all six for 25¢—in each case, plus a self-addressed stamped envelope. Address T. W. M. Long, president and general manager, Reader Railroad, P.O. Box 6049, Shreveport, La. 71106.

"We have just bought two suburban cars," President Long writes, "each seating 100 persons, from the Rock Island at Chicago. This brings up our seating capacity per train from 130 to 330. All we need now are more passengers. Come out and see us! We'll give you a friendly welcome.

"Thanks for publishing that picture of Mrs. John E. Martin and myself in Feb. '65 *Railroad Magazine* in connection with a trip to buy steam locomotives and parts from the National Railways of Mexico. I am glad to report that this trip was successful. We secured many useful parts for the Reader Railroad. I regret that I was unable to go on the trip myself with Mr. and Mrs. Martin and Kim Byrne, our chief mechanical officer. The Martins live in Memphis, Tenn. John is an Illinois Central engineer. His Mexican-born wife, Estela, kindly served as interpreter for Kim."

Setups and Pickups

We welcome readers' letters, especially short ones. The shorter the better. It is impossible for us to find space to publish one-20th of the material we get for this department.

Too many of the pix that fans generously offer us are merely "portraits" of engines and/or trains. Doesn't *anybody* ever take good pix of other railroad subjects, including human interest?

Our next loco rosters will cover Mississippi shortlines and the Pacific Great Eastern. James Buckley comments on our F. del S. roster (April issue). He says 7141-1 and 7141-2 were formerly numbered 23001 and 23002. The two unknown units appear to be Alco Products road switchers 7123-1 and 7123-2. He also observed MLW switcher 7131-1. Concerning our Louisiana shortlines rosters (May issue) Charles Mizell says TP-MP 956-958 are 1500-hp. RS-2's while No. 959 is a 1600-hp. RS-3. The 958 was originally Texas & Pacific 110 but was sold to the TP-MP and renumbered 23.

"Has anyone ever written a book on early-day railroading in the State of Arizona?" asks Jim Penton, Summer Session School, Box 196, Bondurant, Wyo. 82922.

Says Bob Rathke: "My ad in April *Switch List* drew a tremendous response and resulted in many good additions to my collection of B&O railroadiana."

LA&L Is Selling Stock

On behalf of the Livonia, Avon & Lakeville, this letter comes from its president C. R. Brennan, Livonia, N.Y.

"We are one of the nation's newest common carriers, having received ICC approval to operate a former branch of the Erie-Lackawanna south of Rochester, N.Y. We own a 45-ton GE diesel to power our freight trains over the 13-mile line between Livonia and Avon.

We hope to inaugurate passenger service this summer. For this purpose, we recently bought a 125-ton Baldwin 2-8-2 steam locomotive (formerly No. 16 of the Elk River Coal & Lumber Co., Swandale, W. Va.). It will require about $10,000 to get her in shape. As a small railroad, our resources are very limited. Frankly, we need help. The ICC has authorized us to sell common stock at $10 a share. One of the best ways for

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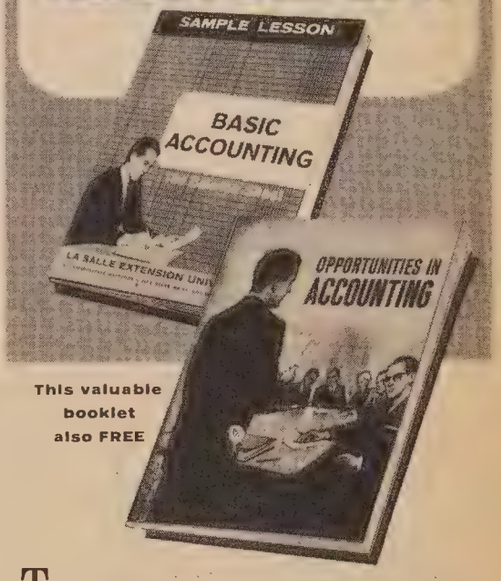

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Railroad-picture glasses, 12-ounce size, gold-rimmed, are available at $4 per set of 8 postpaid from Sidney N. Phelps, manager of Dining Car Service, Pennsylvania Railroad, Long Island City 1, N.Y. There are 4 designs: the *John Bull*, first engine to have a "cowcatcher"; the *Broadway Limited*, and 2 views of New York's Penn Station, showing the past and the future.

rail enthusiasts to help preserve the age of steam is to participate in the ownership of a steam-powered shortline.

"LA&L is no museum nor amusement park. It has no 'Western' village or phony oil headlamps. We want to operate the 16 in common-carrier, revenue-producing service, just as her thousands of sisters operated for many years."

Another reader, R. G. Nugent, McVean Rd., Caledonia, N.Y. 14423, has this to say about the LA&L: "Our road runs from an Erie-Lackawanna connection at Avon to Livonia, 11.5 miles. A branch runs from Conesus Lake Jct. to Lakeville, (on Conesus Lake), 1.5 miles. Passenger trains will make the 23-mile round trip over the main line, climbing an almost continuous grade of near 1% the entire distance. Livonia is on U.S. highway 15 and U.S. 20-A, 25 miles south of Rochester, 18 miles south of the Thruway, 7 miles south of U.S. 20 and N.Y. 5—which is the reason for the slogan, 'Serving the Crossroads of Western New York.'

"An enginehouse for our steam locomotive has just been completed. Until the diesel shop is built this summer, it will serve mostly as a diesel house. Temporary freight and operating offices also will be in the engine house at Lakeville. The new shop will include permanent operating offices. General offices are in Livonia.

"The station at Livonia (built in 1860) is being renovated for passenger service. Passenger excursion trains will, if all goes well, use one of the two diesels until No. 16 arrives. Fares, $2 for adults, $1 for children under 12, with group fares of $1.50, and 75¢ for 25 or more. Week-ends, holidays.

"I understand the Erie-Lackawanna had the superstructure, engines, and generators removed from two of their G-E 44-ton engines, added ballast, and are using them for calves. Think they were the 24 and 25. Two ex-DL&W 44 tonners, 51 and 52, were up for sale, along with about 30 other engines, including the 1100-1114 series of Baldwin road-switchers. Ex-Erie 26 is the shop engine at Susquehanna, Pa., car shops.

"It certainly is a pleasure to read *Railroad* monthly."

He's Listing Steam

For the past two years Victor Koenigsburg, 5573 Forbes Ave., San Diego, Calif. 92120, has been compiling a list of steam left in the U.S. aside from locomotives in amusement parks.

"This list," he writes, "includes those owned by common carriers and operating occasional fantrips, those on display, those in the hands of private owners, clubs, and companies, and even those stored in junk yards for sale or scrapping. I hope readers will send me similar lists and pertinent information.

"Most of my data comes from *Railroad Magazine,* but I wish your steam notes were more detailed. My list shows that California has about 173 steam locos, far more than any other state. When Sierra Railroad's 2-8-2's numbered 34 and 35 arrive in San Diego to start excursions on the San Diego & Arizona Eastern's Coronado branch they will raise San Diego County's steam-engine population to five. The others in that county include SD&AE 104 (ex SP 2720), a 2-8-0 type (Baldwin, 1904) displayed at Del Mar Fair grounds by the Railway Historical Society of San Diego.

"Charles Pollard of Vista, Calif., owns an 0-4-0 (Baldwin, 1878) with an odd gage, 42½ inches. He bought her from a San Francisco junk yard which had stored her 30 years. In 1962 he spent much time and money converting her from an 0-4-0T and putting her into operating condition. Now and then he steams up the little old kettle and runs her on a short piece of track in front of his machine shop. A National City junk yard known as Scrap Disposal has an 0-4-0T for sale. She has been in open storage for years. Her past seems to be unknown. The only clue is CRI&P stamped on her slide-valve steam chests.

"Another locomotive awaiting sale is at National Metals & Steel on Terminal Island in Los Angeles. She is SP 1765, a 1901 Baldwin 2-6-0 with a covered wagon-type tender. She has been in open storage 5 or 6 years.

"Arizona's steam stronghold, the Magma Arizona Railroad, has put its No. 7, a 2-8-2, back into service after giving her extensive overhaul. Steam looks good there for at least 3 or 4 more years. Last summer the SP built a new line between its Tuscon-Phoenix main line from Poston (north of Coolidge) 7 miles to its Hayden branch at Magma, where the MA connects. The new line went into operation last September and all El Paso-Los Angeles passenger trains are now routed over it. Since SP No. 40 is due thru Magma shortly after the MA freight usually gets there to switch the junction, many passengers must wonder at the sight of the old MA loco batting cars around the desert."

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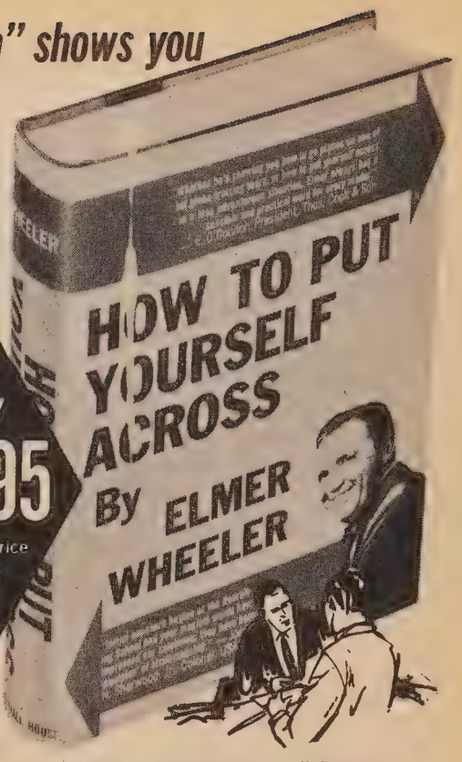

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• ABOUT THE AUTHOR •

Elmer Wheeler, known as "Mr. Sizzle" to millions of salesmen around the world, is always in great demand for speaking engagements. Early in his career Elmer took as his motto "Don't sell the steak—sell the sizzle," and turned it into an imposing business philosophy with a string of successes to prove it.

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Humanitarians: Clarence Hockenberry (Pennsy shopman at Mingo Jct.) and wife, Virginia, of Steubenville, O., have put out a welcome mat for homeless dogs, starving cats, and injured birds. They helped to found the Ohio Valley Animal Rescue League and Wild Life Protective Society and gave land for the organization's projected buildings. "We need additional funds," says Hockenberry.

Two of the rare old illustrations in Morris Cafky's *Colorado Midland*, reviewed on page 54: (above) New Castle wreck of Aug. 29, 1913; (below) engine 15 decorated to pull special train for President Theodore Roosevelt in April, 1905.
Both photos from R. H. Kindig collection, 3831 Perry St., Denver, Colo.

Ex-Hogger's Museum

In the basement of his home, a retired Detroit Terminal engineer named Walter J. Baisch has an assortment of railroadiana that would make a railfan's mouth water. Among his pieces are gages, gage lights, oil cans, a throttle, a bell and other steam relics once used by his late father, an engineer on the old Detroit, Grand Rapids & Western (now Chesapeake & Ohio).

In recent years Walter Baisch has added paraphernalia he used himself. He has acquired brake valves and a whistle that were on a steam engine in 1889 and has photos taken in 1900 of his father with steam locomotives. He also has seven "sets" of miniature steam locomotives in his basement museum.

His father passed away in 1907. But by that time Walter had already started firing for the PM. Discharged when they found out how young he was, he later went firing on the Wabash and achieved his ambition to become an engineer in 1922. He was with the DT from 1915 until his retirement in 1957.

He lives in Detroit at 2382 Green Ave. He's still looking for an oil headlight and an old style lubricator with the sight and feed glass on the outside. This information comes from *The Locomotive Engineer.*

Photos and Postcards

A list of sources of photos, drawings, and/or postcard pictures of locomotives and trains has just been issued by the Association of American Railroads. This list, of course, is incomplete. We are reprinting it with the following notes:

(1) Nobody gives away free pictures.

(2) When you write to any of these names, enclose a self-addressed stamped envelope for reply.

(3) In some cases (we don't know which ones) list is available.

Edwin P. Alexander, Upper River Rd., Box 333, Yardley, Pa. 19068, has 11-page list of photostats and blueprints of locos, cars, some old bridges and buildings, even a few canals, total of over 800 items, plus a few hundred more to be listed. He thinks he has every PRR passenger car (incl. miscellaneous) from the 1870's to date. Will send list for large self-addressed envelope on which are 15¢ in U.S. stamps. (Ed Alexander was No. 12 in Railroad Magazine's series of "Interesting Railfans.)

H. L. Broadbelt, 252 E. Areba Ave., Hershey, Pa. 17033, sells photos from original Baldwin negs., 1860 to 1950; sells prints, 4x7 25¢, 8x10 50¢; 100-page catalog $5.

Casey Jones Museum, Box 382, Jackson, Tenn., sells jumbo-sized colored postcards of loco (similar to Casey Jones's) that stands outside the museum, 10¢ each plus postage; p.c. showing loco and museum, 5¢ plus postage.

Colorado Railroad Museum, Box 641, Golden, Colo. 80402, will send catalog of rr. pix, books, rr. cloth patches, other railroadiana, for 20¢. (Operated by Bob Richardson, No. 20 in Railroad Magazine series of "Interesting Railfans.")

Charles Coniff, 534 Witsell Rd., Jackson, Miss. 39206, sells 4x5, 5x7, and 8x10 steam and diesel prints; will send 16 page list for self-addressed stamped env.

Edaville Railroad, South Carver, Mass. 02556, sells colored postcards of this n.g. line and other Edaville activities, 5¢ ea. plus self-addressed stamped env.

Gold Coast Railroad and Museum, c/o Miami Railroad Historical Society, Inc., 811 S.W. 6th St., Ford Lauderdale, Fla. 33315, sells colored postcard showing museum's active steam train, plus illustrated museum brochure, 5¢ plus self-addressed stamped env. (See article on Gold Coast RR. by Wilbur T. Golson in Feb. '64 Railroad Magazine.)

Knott's Berry Farm and Ghost Town, Buena Vista, Calif., sells colored postcards, incl. many rr. views. 5¢ ea., 6 for 25¢, plus postage.

Library of Congress, Prints and Photographic Division, Washington, D.C. 20540, sells many rr. photos at prices ranging from 65¢ to $2.65, depending upon whether or not they have negs. (Included is large steam loco collection of late Charles B. Chaney, who specialized in Pennsy and B&O.)

Milton Bradley Co., Springfield, Mass., sells boxed set of 40 beautiful oldtime rr. pix (not Currier & Ives), postcard size, most of them in color, each with historical data by Freeman Hubbard printed on back, $1 a box postpaid. Also obtainable in toy and large stationery stores.

National Museum of Transport, Barrets Station Rd., St. Louis, Mo., sells b&w postcards of locos and rr. cars, also 6 postcards of locos in color, 5¢ ea. plus postage. (See article on this museum in Dec. '62 Railroad Magazine.)

Ohio Railway Museum, Box 206, Worthington, Ohio 43085, sells set of 8 postcards, 55¢ plus postage. (David Bunge is publicity director.)

Rail Photo Service, 210 Sherman Bldg., Boston, Mass. 02115, sells very large number of b&w loco and train pix, various sizes, mostly action shots. (Founded and operated by H. W. Pontin, No. 24 in Railroad Magazine series of "Interesting Railfans.")

Railway & Locomotive Historical Society, Inc., Baker Library, Harvard Business School, Boston, Mass. 02163, sells photos but only to its members; also conducts its own Trading Post for members. Has Chapters in New York, Chicago, Pacific Coast, and Southern Calif. Dues, $5 year. (President of R&LHS, Charles E. Fisher, was No. 6 in Railroad Magazine series of "Interesting Railfans.")

Railway Classics, 102 Cherry St., Janesville, Wis., sells attractive full-color Christmas cards and prints, mostly of Steam Age. Write for details.

Railway Historical Society of San Diego. Box 9351, San Diego, Calif. 92109, sells set of 3 diff. colored postcards, 20¢ postpaid.

Alvin F. Staufer, Rte. 4, Box 145, Medina, Ohio 44256, sells beautiful large steam loco wash drawings of C&O, NYC, Pennsy, P&LE, SP, UP, and SP, on good paper, $1.50 ea. Also set of 4 oldtime prints, 20x9". $3. (Staufer was No. 25 in Railroad Magazine series of "Interesting Railfans.")

Strasburg Rail Road Shop, 1835 Pioneer Rd., Lancaster, Pa. 17602, sells 16 different colored postcards of station and steam-powered trains, etc., 5¢ each, 6 for 25¢. If you order less than 6, enclose self-addressed stamped env.

C. V. Zimmer, 2034 South St., Lincoln, Neb. 68502, sells 10x14" b&w reproductions of original watercolor paintings of locos and trains in action, steam, diesel, elec., 50¢ ea. postpaid, mailed in tube.

Pictures for Framing

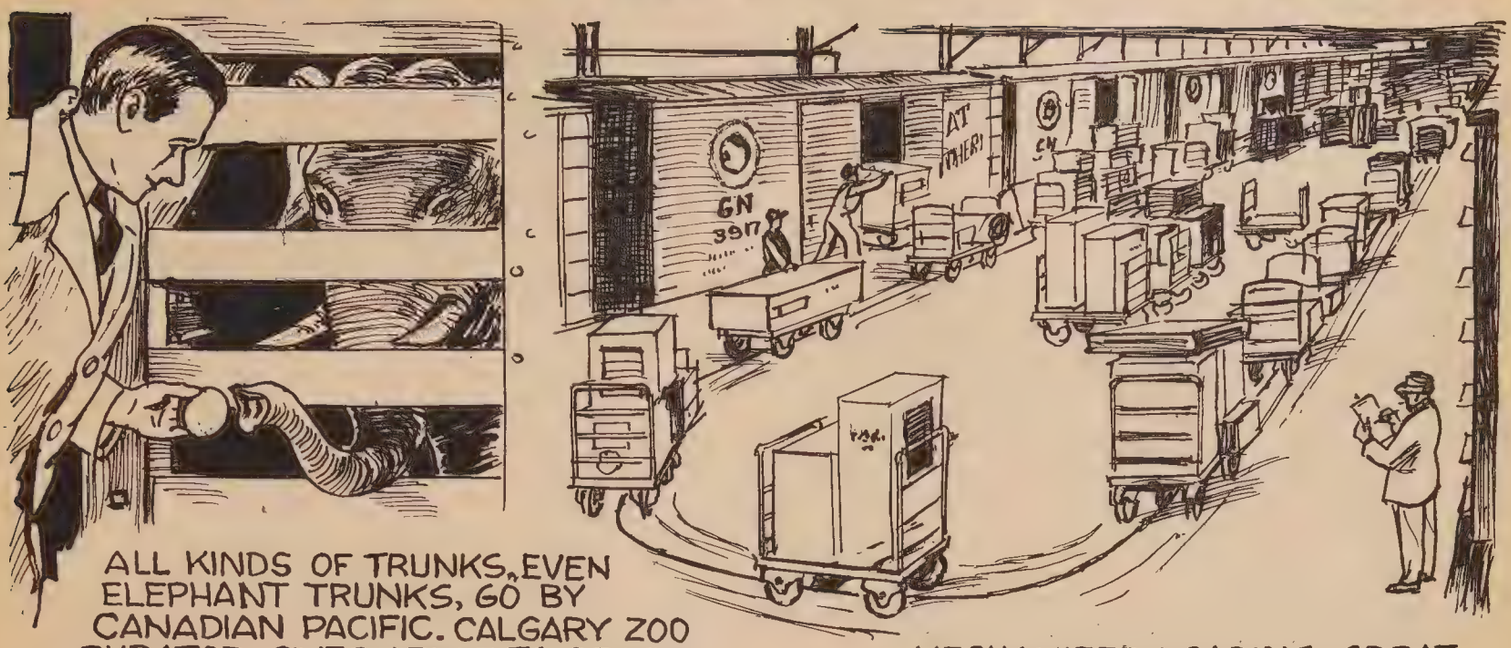
Colorado Railroad Museum, Box 641, Golden, Colo., sells full-color 9x12" prints of early-day scenes on South Park (Colo.) narrow-gage, by Philip Ronfor and Richard Ward; set of 4 by either artist, $3.50; full set of 8, $7.

Howard Fogg, 2320 Balsam Ave., Boulder, Colo., sells his "Steam in Portrait," a series of full-color lithographs of well-known steam locos in action, sizes 15x20" and 17½x22", $7.50.

Model Railroader, 1027 N. 7th St., Milwaukee 3, Wis., sells 9 reproductions of original watercolor paintings and Kodachrome photos by top-flight artists, 10x15" plus border, $1 ea., all 9 prints $7.50.

ALONG THE IRON PIKE

by Joe Easley



ALL KINDS OF TRUNKS, EVEN ELEPHANT TRUNKS, GO BY CANADIAN PACIFIC. CALGARY ZOO CURATOR GIVES APPLE TO CRATED 2½-TON PACHYDERM ARRIVING BY RAIL FROM TORONTO ZOO. (from C.P. Spanner)

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BOSTON & ALBANY'S TWO PAY-CARS, 95 AND 96, MADE LAST RUNS IN APRIL, 1927. DRAWN FROM PHOTO BY LATE GEO. WORCESTER, SHOWING NO. 96. THE ONLY PHOTO OF A PAY-CAR INTERIOR WE HAVE EVER SEEN.

(Negative owned by former crew man of No. 96: Donald E. Shaw, 94 Federal St., Springfield, Mass.)

The Switch List

THESE items are printed free and in good faith but without guarantee. Keep within 28 words, including your name and address. Use abbreviations such as *tts.* (timetables); *emp tts.* (employees timetables), and *SSE* (send 5¢ stamped envelope for list or details).

Write each item plainly or pen-print or typewrite it on a postcard or separate sheet of paper—not buried in a letter about other matters. If you want pen pals, state your age and special interests so that they will know what to write about. Some readers forget to do this.

A tight printing schedule compels us to close the *Switch List* long before publication. As this magazine hits the newsstands our August department is already closed. Entries for September issue (out about Aug. 10th) should reach us by June 11th. Address Sy Reich, *Railroad Magazine*, 205 East 42nd Street, New York, N.Y. 10017.

BERNARD ALBERT, 3535 Rochambeau Ave., New York, N.Y. 10467, wants slides of N&W electrification.

C.T. ANDREWS, 4231 S.W. 38th St., West Hollywood, Fla. 33023, sells or trades 4x5 and p.c.-size pix LV, RDG, L&NE, DL&W, CNJ, D&H, NYC, Pa. shortlines.

R.J. ASKEVOLD, 100 Elm St., Crystal Lake, Ill. 60014, wants address of R.J. Foster.

JOHN BARTH, Jr., 54 Poplar St., Closter, N.J., sells pix and slides of diesel, steam, elec. LIRR, EL, NYC, etc. List 5¢.

DAVE BECK, 2046 Carabel Ave., Lakewood, O., wants any size pix or negs. of stainless-steel obs. cars on NYC Twilight Ltd., Ohio State Ltd., and Southwestern Ltd.

CRAIG BOSSLER, Box 58, Fleetwood, Pa., wants any size pix or drawings of NYC BW road diesels, esp. pre-sharknose models.

BOB BOWES, 4248 Alden Dr., Minneapolis, Minn. 55416, wants trolley and interurban uniform badges, buttons.

J.N. BRADFORD, 59 Hargrave St., Winnipeg 1, Man., Canada, trades CN emp. tts. for 35mm steam train slides.

CHRIS BRESCIA, 166 Lake Flower Ave., Saranac Lake, N.Y. 12983, wants books by Kip Farrington, pix modern steam locos and steam loco parts.

O.W. BROOKS, Box 187, Emporium, Pa., wants R&LHS Bulletin 76.

A2C FELIX BRUNOT, Box 819, Moody AFB, Ga. 31601, trades class 1 rr. diesel negs., size 120 or 616.

H.E. CHELF, 3710 N. Harmon Ave., Peoria, Ill. 61614, will sell 15-vol. set of Kirkman's "Science of Railways" to highest bidder, by July 16; also "Loco. Air Brake," ICS textbook.

AL CLOW, 3330 Curtis Dr. 102, Hillcrest Heights, Washington, D.C. 20023, buys model mags., 1924-'34, calendars, Off. Guides.

DAVE COHEN (age 20), 230 Juanita Way, San Francisco, Calif. 94127, desires pen pals, esp. New Yorkers.

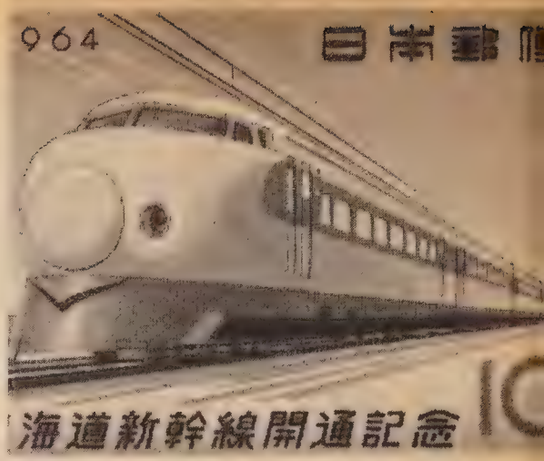
A.H. COVERDALE, 140 Hendon Dr. N.W., Calgary, Alta., Canada, sells size 616 pix of N. Alberta Rys. steam, diesel, eqpmt. List and sample 15¢. Wants negs. ON Rys. locos, eqpmt.

STEVE DELANEY (age 14), 131 Lynnefield St., Peabody, Mass. 09160, wants pen pals.

FRANK DeLARM, 359 Glen Oak Rd., Venice, Fla. 33595, sells rr. bond and stock certificates. List, sample 25¢.

RAY DESCHENES, 903 Mohawk Rd. E., Ste. 305, Hamilton, Ont., Canada, sells 3½x5 to 11x14 pix steam on CN, CP. List 10¢. Buys, sells steam negs. of CN, CP, TH&B.

TOM DORSEY, 5437 Remmell Ave., Baltimore, Md. 21206, buys BTC pix, slides, negs. of all car types, esp. PCC 7311.



Enlargement of new Japanese postage stamp, blue and white, shows world's fastest train, on the new Tokaido Line.
Courtesy of Steve Maguire

TOM DRESSLER, 2708 Ritchie St., Portsmouth, O. 45662, will trade N&W mags. 1929-'55 for brass models or N&W pix or slides.

GILBERT EVERSULL, 2748 Willard Ave., Cincinnati, O. 45209, wants pix of 2-inch-gage common carriers.

EDGAR FOULKS, 24 State Towers, Sharon, Pa., will sell big collection of rr. books, steam pix, old tts., old issues Railroad Magazine, Trains, Engrs. Journal.

LEONARD GOTTLIEB, 39 Rockledge Pl., Cedar Grove, N.J., wants info. on rr. crossing signal collections.

W.A. GRIMM, 204 Gregory Ave., West Orange, N.J., will sell steam loco bell and headlight. (SSE)

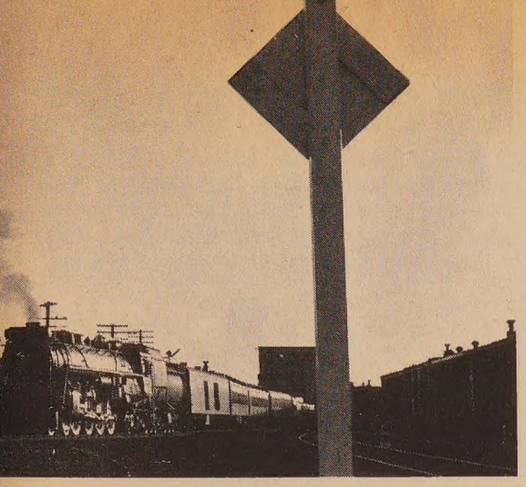
BOB GREENAWALT, 3643 N. Rosemead Blvd., Rosemead, Calif., buys and trades defunct rr. stock certificates, also Poor's, Moody's manuals.

JIM HAUGH, 3650 Mt. Vernon Rd., Sebastapol, Calif. 95472, sells bright sharp 35mm color slides of rr. cars, 25¢ ea. (SSE)

JOHN HEEBER, Box 105 ET/A School, U. S. Naval Schools Command, Treasure Island, San Francisco, Calif. 94130, wants back issues of Trolley Sparks, CERA bulls.

Photo by Mac Owen, Newcastle, Calif.

Present-day "riders of the iron trail" on the 57-mile Sierra Railroad, shown with locos 9 and 28 at Placerville, Calif.



May 21, 1961: NRHS excursion train on Canadian National with loco 6167 pulls into Paris Junction, Ontario, Canada.
Photo by Allen A. Jorgensen

JOHN HENDERSON, 156 Essex Way, Pacifica, Calif. 94044, sells lists of passenger trains serving principal U.S. and Canadian cities. (SSE)

KARL HENKELS, 1628 N. Oakley Ave., Chicago, Ill. 60647, sells or trades orig. Kodachrome slides of diesels and cabooses in his area. No list.

NORMAN HILTON, Systems Planning Divn., Harris Bank, 111 W. Monroe St., Chicago, Ill. 60690, buys slides and pix of Chi. trolleys.

C.R. HUFF, 765 Clark St., Westfield, N.J. 07090, wants to hear from collectors of cancelled rr. and trolley co. stocks and bonds, to form club of such collectors.

EARL HUGHES, Rte. 2, Mitchell, Ind., wants CNO&TP steam and station pix, agents uniform cap, pre-'30 emp. tts., kerosene lantern.

CLIFTON HULL, 203 E. 16th St., North Little Rock, Ark., will sell Railroad Magazine 11/49 and 6-7/50, also Dierks Forest link and pin.

PAUL JONES, 901 Broad St., Endicott, N.Y. 13760, buys or trades for wrought-iron pin from link-and-pin coupler.

ARNOLD JOSEPH, 2512 Tratman Ave., New York, N.Y. 10461, sells old issues RAILROAD Magazine, Trains, R&LHS Bulls., model mags, etc. (SSE) Buys collections of such mags., good cond.

AL JUSTES, Jr., 408½ W. Main St., Oklahoma City, Okla., buys Irish rrs. pix, negs., literature. Wants lists of Okla. shortlines and industrial rrs.

RON KINUM, 7671 Quebec Dr., Huntington Beach, Calif. 92646, wants pen pals interested in PE.

Rev. A. KOVACS, 500 S. Franklin, Wilkes-Barre, Pa., trades 2 dupl. slides Chestnut Ridge 1923 railbus for 2 elec. or trolley or 1 non-exhibit steam origs.

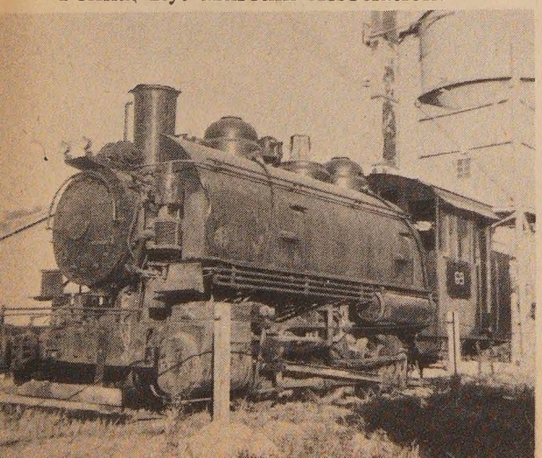
C. KOWAL, 6615 S. Bell Ave., Chicago, Ill. 60636, sells caboose marker lamps. (SSE)

PARD LIVELY, 2224 N. 12th Ave., Pensacola, Fla. 32503, wants ¾ "B" size 116 hopper prints of Midwest, also VGN boxcars, cattle cars; sell or trade. Southern Ry. pix sizes 116, 620. (SSE)

M.V. LYONWOOD, Box 937, Mt. Shasta, Calif. 96067, will sell his orig. 20x24 oil paintings in full color of 20th Century, Broadway Limited, SP 4400, etc. (SSE)

PAT McDEVITT, 911 MacDade Blvd., Collingdale, Pa. 19024, trades old issues of Railroad Magazine, Off. Guides, PRR publications, and other railroadiana for PRR equip. rosters and pix. He is a Pennsy car inspector.

Photo by Dave Hamley
No. 69 of Duquesne Slag Products Duquesne Slag Products Co. No. 69 (0-6-0T, Baldwin, 1930), donated to Penna. Ry. Museum Association.



BOB McVAY, Box 625, King City, Calif. 93930, buys, sells, or trades old issues of Railroad Magazines, Off. Guides, Trains, railfan publications. (SSE)

BILL MYERS, 1511 N. 2nd St., Harrisburg, Pa. 17102, sells color pix of CNS&M 411 running in Brooklyn; other Eastern traction pix. (SSE)

GARY MURRAY (age 21, CN brakeman) 2 Mascot Pl., Willowdale, Ont., Canada, wants pen pals who are brakemen on other roads.

ARTHUR NICHOLS, 2508A 36th St., Los Alamos, N.M., buys railroad tts.

FRANK NOVAK, 25451 Drakefield Ave., Euclid, O. 44132, buys orig. 35mm color slides and negs. of U.S. steam or traction prior to 1960.

W.R. OSBORNE, 1019 S.E. 12th Ave., Deerfield Beach, Fla. 33441, sells p.c. and 4x5 steam pix B&O, C&O, DL&W, LV, CNJ, RDG, SOU, PRR, etc. (SSE)

C.G. PARSONS, 8416 Conover Pl., Alexandria, Va. 22308, sells Kodachrome 35mm dupl. slides of steam, diesel, trolley. Sample 25¢.

JACK PIPPIN, 202 E. Fairview Ave., Johnson City, Tenn. 37601, sells Southern Ry. and Pullman Co. railroadiana. (SSE)

L.E. POOLE, 515 Trump S.E., Canton, O., will sell Railroad Magazine from '36 to date, Trains, etc. (SSE)

BOB RATHKE, 56 Woessner Ave., Pittsburgh, Pa. 15212, trades PRC slides or 35mm negs. for slides or negs. of St. Louis, BTC, DCT railroadiana. (SSE)

WAYNE REEDY, 1228 Congress St., Middletown, Ind. 47356, wants pix CCC&SL at N. Vernon, Anderson, Wabash, Benton Harbor. Wants switch keys, too.

RAY SABO, 19975 Norwood, Detroit, Mich. 48234, trades orig. 35mm color slides of Detroit area rrs. for those in your area.

J.F. SCARBROUGH, Court House, Murfreesboro, Tenn., wants British Isles pen pals interested in steam.

JOHN SCOTT, 3716 Rosebrook Ct., Concord, Calif., sells loco bells, whistles, horns, markers, switch-stand lamps, hand lanterns. (SSE)

WAYNE SCOTT, 2026 S. Dakota Ave., Sioux Falls, S.D., desires action pix GN class Q-1.

JIM SEACREST, 2750 Woodscrest, Lincoln, Neb., wants any size negs. NEO 601, FW&D 1st 601, CB&Q FT 103, 9130, 9138, 9146.

FRANK SEIFFERT, Jr., Box 21, Orange, N.J., sells Eastern steam and elec. pix. Either list and sample 25¢. Both lists plus sample of each 40¢.

AL SHEVER, 5445 Netherland Ave., Riverdale, N.Y. 10471, wants b&w negs. steam, tapes of class 1 steam, Loco Cyclopedias.

JIM SORENSEN, 7222 Lansdowne St., St. Louis, Missouri 63119, seeks Frisco diesel roster.

CHAS. TAUSCHER, 1538 N. Waller Ave., Chicago, Ill. 60651, buys and sells transportation tokens.

W.C. THURMAN, 4733 Morganford Rd., St. Louis, Missouri, sells and trades size 120 and 35mm steam and diesel negs.

BRAD TORRENCE, 1036 Nottingham Rd., Grosse Point Park, Mich. 48230, will sell railroadiana collection. List free.

T.J. TRAVERS, 41 Bowdoin St., Worcester, Mass. 01609, wants pix LH switchers on NYNH&H, NYC&SL, CR&I and LH road switchers on NYC, PRR.

W.M. UERN, 13 1st Ave., Nailsworth, South Australia, buys books on steam locos.

FRANK WILLIAMS, 9851 E. Callita St., Arcadia, Calif. 91007, wants Ira Swett's "Interurban Special" Nos. 6, 8, 9.

BOB YANOSEY, 40 Hendel Ave., North Arlington, N.J., sells or trades diesel negs. on approval: CRRNJ, EL, LV, NYS&W, other N.J. roads.

C.R. YUNGKURTH, 306 Ridgefield Rd., Endicott, N.Y. 13764, buys Loco Cyclopedias, catalogs, rr. books.

Model Trading Post

FRANK BERTL, Box 123, Roscommon, Mich., will sell ¼ scale Hudson, Erie K5 Pacific; 3/16 scale PRR K-5, Hudson, etc. (SSE)

BOB MASON, 545 State, Holland, Mich., will sell O scale traction Thomas frt. motors, hanger poles, relays, etc.

ALDEN MILLER, 3212 34th Ave. S., Minneapolis, Minn. 55406, wants Lionel, Ives, AF catalogs.

WM. OVERHOLSER, 2137 Clifton Ave., Springfield, O., wants to hear from all owners of 12-inch pikes.

PAUL PIETRZAK, 39 Valley Circle Lane, Hamburg, N.Y. 14075, sells HO gage locos, castings, etc. (SSE)

JOE STAUBER, 709 W. Arnold St., Marshfield, Wis., will sell HO locos (N&W 2-8-8-2, Bowser 4-6-6-4, etc.) and cars; also color slides. List. ●

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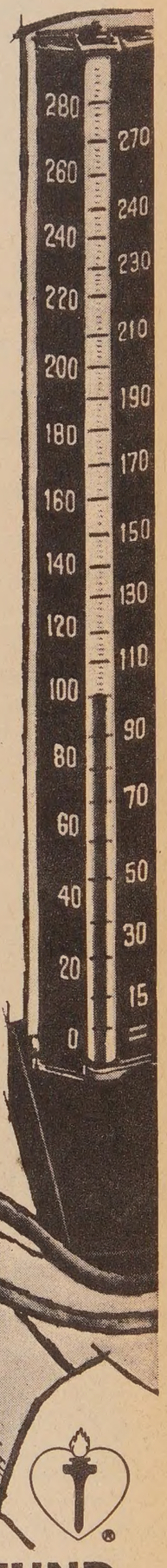
Blood Pressure
HIGH?



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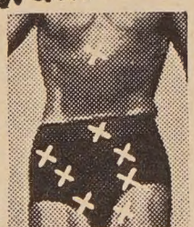

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No need today to look other than your best. When you know you do, you feel better, do your job better—and you're more fun! Don't be ignored because you look older than you are. Clean, cool, new flexible base, contoured to each individual bald area. NO NET, NO GLUE, NO FUSS, NO MUSS. The only answer—TAYLOR TOPPER.

MAIL COUPON NOW, COMPLETE DETAILS FREE TAYLOR TOPPER, 123 W. 28 St., New York 1, N. Y. Dept. 6073 Please mail FREE literature on TAYLOR TOPPER in plain white envelope, positively no obligation on my part. Advise office address closest to me.

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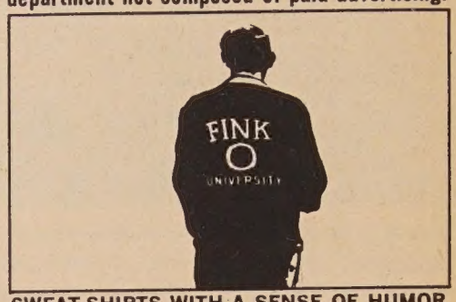

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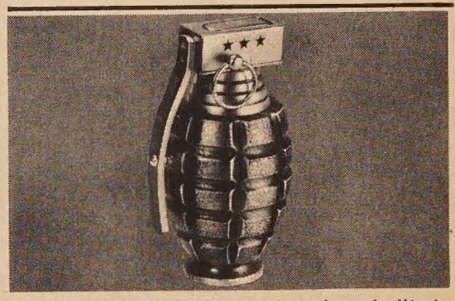
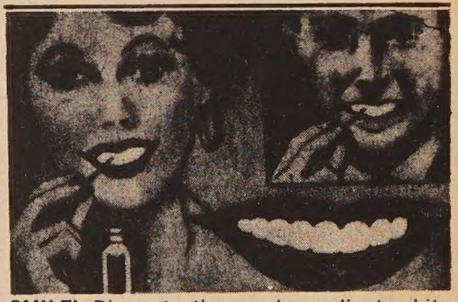


GRENADE LIGHTER, combat-size, built to exact specifications in dimension, weight and balance of heavy silver-tone metal. Pull pin—presto!—it seemingly explodes into a flame for your cigarette. It's 4¾" high and weighs ¾ lb. Just $3.98 ppd. Big Three Enterprises, Inc. Dept. RS, 1109 Sixth Ave., New York 36.



SMILE! Dingy teeth can be radiant white with Wyten, "Dental Cosmetic". Covers stains, blemishes and gold fillings. Safe and harmless for natural and false teeth. Just brush on! $1.98 for 3-4 mos. supply. Nu-Find, Dept. AMG-7, Box 205 Church Street Sta., N.Y. 8.

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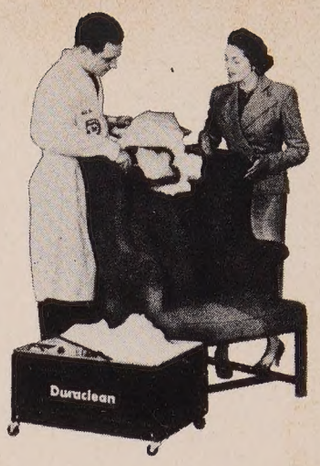
Would You Like to Take in $140 after Supper?



This is exactly what L. Burnett did while still employed. Here are his own words:

"I worked at my Duraclean business part time until I saw that I could make as much in a week as my job paid for a whole month. One night, after supper, I took in $140. Since going full time, I've had single jobs running $300 and more."

Mr. Burnett and one helper serviced this $140 "after-supper" job. The national price guide provides a Duraclean dealer a gross profit of $6 per hour on EACH serviceman plus $9 per hour on any service he himself renders. Your income is limited only by the number of servicemen you employ.

To own a business is much easier than you think. We show you how . . . step by step. The 24 page fully illustrated booklet we'll mail you (with no obligation) explains how most of your gross profit becomes a *clear net profit* to you.

Start while Continuing Present Job

We furnish all the equipment...and help finance you

If you've wanted to BE YOUR OWN BOSS . . . to become financially independent . . have a fast growing income . . and own a Nationally Advertised business, now YOU CAN.

You can stay at your present job while your customer list grows . . then switch to full time, lining up jobs for your servicemen to do.

One small job a day brings a good starting income. As you add full or part-time servicemen, your income is limited only by your own effort.

Dealers operate from a shop, office, or their home. Equipment is portable . . the electric Foamovator converts to a convenient carrying case.

At the start, you may want to render service yourself . . . or you can start out with servicemen. This business is easy to learn . easy to start . . so easy to service that women dealers often do it. We prefer you have no experience . . not have to "unlearn" old methods.

We are NOW enlarging this worldwide system of individually-owned service businesses. If you are reliable, honest and willing to work to become financially independent, we invite you to mail the coupon.

It's Easier than You Think to Start Your Own Business

When you receive our illustrated booklet, you will see the way we show you step by step how to quickly get customers . . . how to steadily build more customers from their recommendations.

All six services are rendered "on location" in homes, offices, hotels, theaters, churches, clubs, motels and institutions.

These superior, safer and convenient methods spread Duraclean dealerships throughout North and South America, Africa, Portugal, England, Israel, Norway and many other countries.

National Magazine advertising explains the superior merits of your services, builds your customer confidence and brings job leads to you.

We and a Duraclean dealer will train you and assist you. He'll reveal his successful, proven methods. We show you all you need to know.

You have pre-tested newspaper and yellow-page ads, commercials, and a full mailing program.

Furnishings stores, insurance adjustors, and decorators refer jobs to our dealers. These year 'round services are in constant demand.

TODAY is the time to reserve a Duraclean dealership . . before someone takes your location.

Start Small, Grow Big . . . in this Booming Business

Many men have said to us, "I can't afford to give up my job till I know I have a sure thing . . . a sound business that will provide both security and a better living for my family."

That made sense to us so we worked out such a plan . . . and those same men are now enjoying Duraclean dealerships in many communities. You don't experiment. You use tested, proven methods. You have our backing and "know how."

Does this appeal to you? Don't decide now. Mail the coupon so you'll have the facts to decide wisely. There is no obligation whatsoever. You will then know whether this is what you want.

You can start small and grow big just as we did. A third of a century ago Duraclean was an idea . . . but it caught fire and spread rapidly to a worldwide service. It spread because it was based upon (1) superior processes and (2) proven customer-getting methods.

Our first service, the care of carpets and upholstery, exemplifies these superiorities. It not only cleans; it enlivens the fibers . . . revives dull colors. Pile rises with new life. Furnishings are used again in a few hours.

There's no machine scrubbing. No soaking. Duraclean cleans by absorption. Mild aerated foam lightly applied, lifts out dirt grease and many unsightly spots like magic.

Government figures show service businesses growing faster than industries and stores . . . $750 million yearly potential just in rug and furniture cleaning. You have 5 other services.

Space here will not permit describing your other services but they are fully explained in the free booklet we'll mail you. You have six opportunities for profit on every job.

A few hundred dollars establishes YOUR OWN business. A day's profit more than takes care of the monthly payments we finance for you.

Men frequently take in partners.

We furnish electric equipment and enough materials to return your TOTAL investment. If you have good habits and know the importance of customer satisfaction, you can likely qualify for a Duraclean dealership.

It's been said, "Opportunity knocks but once at every man's door." This could be that one rare opportunity in your life.

It is surprisingly easy to learn this business. You can decide from the information we will send you whether to apply for a dealership. So, with no obligation whatever, mail the coupon TODAY.

Own a Nationally Advertised Business

•

Your Services Are Endorsed by McCall's Magazine, Amer. Research & Testing Laboratories and by leading Carpet Mills & Furniture Makers

•

What Dealers Say:

Langdon Lawson: National advertising is tops, creates leads. In September, working alone, jobs totaled $1,475.

R. C. Blue: Customer called a prominent competitor. They said they could not clean her badly soiled furniture . . . to contact me, "if anyone could get it clean, I could"

Charles Randal: Business keeps growing. Made as much as $120 in one day.

D. Kern: Duraclean's proven-best process and the continuous help from headquarters gave me a big jump on all competition.

George Byers: For University, my total billing was $2,416. Total expenses $814.

Gerald Weihrauch: Three persons called me saw Duraclean advertised in magazines.

Edward Hoy: A smoke damage insurance claim bill was $186. All work was done by me in exactly 8 hours and 2 minutes.

John Hoak: I've never worked at anything I enjoyed more than Duraclean.

W. C. Smith: Earned $650 one week. Volume keeps getting bigger.

Service man for dealer **C. Weed:** Furniture was filthy black. When through, I was amazed how clean.

John E. Frost: First 2 months I grossed $1,000 part-time.

Loren Farris: I'm proud to be independent at 30. I wish I had known about Duraclean earlier.

Earl Davis: Our sales increased $17,660 this year.

Ed. Kramsky: In 2 years, I now have two assistants, a nice home and real security for my family.

Resale Service

If, because of illness, moving or for any reason a dealer wants to sell, we maintain a service to locate buyers and to help him sell.

Dealerships resell at up to 10 times the dealer's cost. R.D.K., after 5 months, sold for $2,000 above his cost. L.L., after 30 months, got $7,116 more than he had paid. The value of your dealership and franchise grows monthly.

FREE BOOKLET tells how to Start Your Own Business

With no obligation, we'll mail you a letter and 24 page booklet explaining this business . . . how and why your income grows . . . how we help finance you.

Then decide if this opportunity fulfills your dream of independence and a much bigger income.

Your location should be taken tomorrow . . . so mail coupon today.

Find Out with NO OBLIGATION

Mail this coupon TODAY

It may put you in business

Duraclean Co., S-707 Duraclean Bldg., Deerfield, Ill. 60015

With no obligation, mail letter with 24 page illustrated booklet explaining how I can increase my income and family security with a Duraclean Dealership.

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Address_____

City_____ Zone____ State_____

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NEW 1965 MODELS

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SUPER "88" AUTOMATIC STAR DRAG SPINCAST REEL

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ARGOSY DIRECT DRIVE TROLLING REEL

POWER ACTION BLACK MAGIC FIBRE-GLASS RODS STRONGER THAN STEEL OR BAMBOO

FREE! If you order NOW! 2 LEAKPROOF FLOATING TACKLE BOXES

28 pc. POPPING LURE SET

FIELD TESTED LURES Proven the Deadliest Known

4 FAMOUS TROUT FLIES

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DIP NET

5 pc. DROPLINE FISHING OUTFIT

NEW!

50 NATURAL BAIT LURES

FAMOUS CRAFTY LURES

COMPLETE! NOTHING ELSE TO BUY!

SELECTED FOR YOU BY EXPERTS. This choice fish-getting tackle contains nationally famous brands. Each item carefully chosen—everything you need for all types of fishing. All time favorite lures. A veteran angler or an occasional fisherman can be proud of this precision-built kit. No other bargain like this anywhere.

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